24905

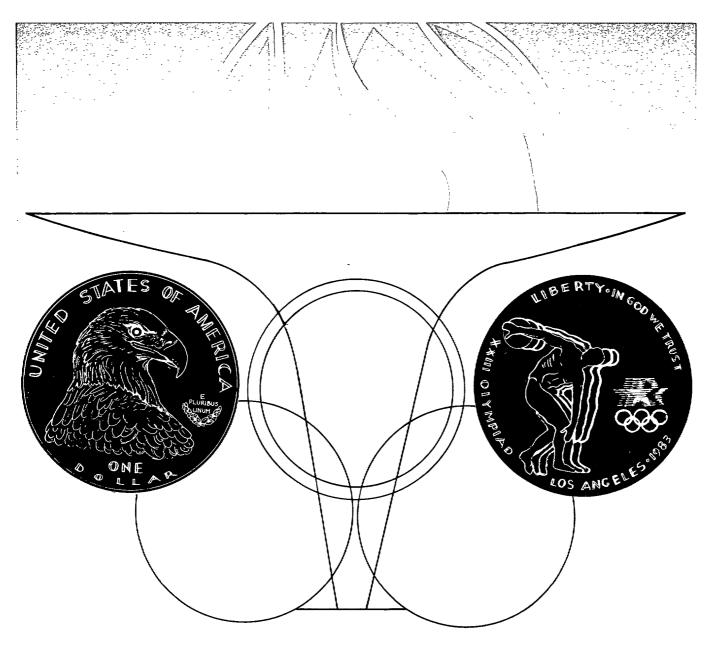
The CAO



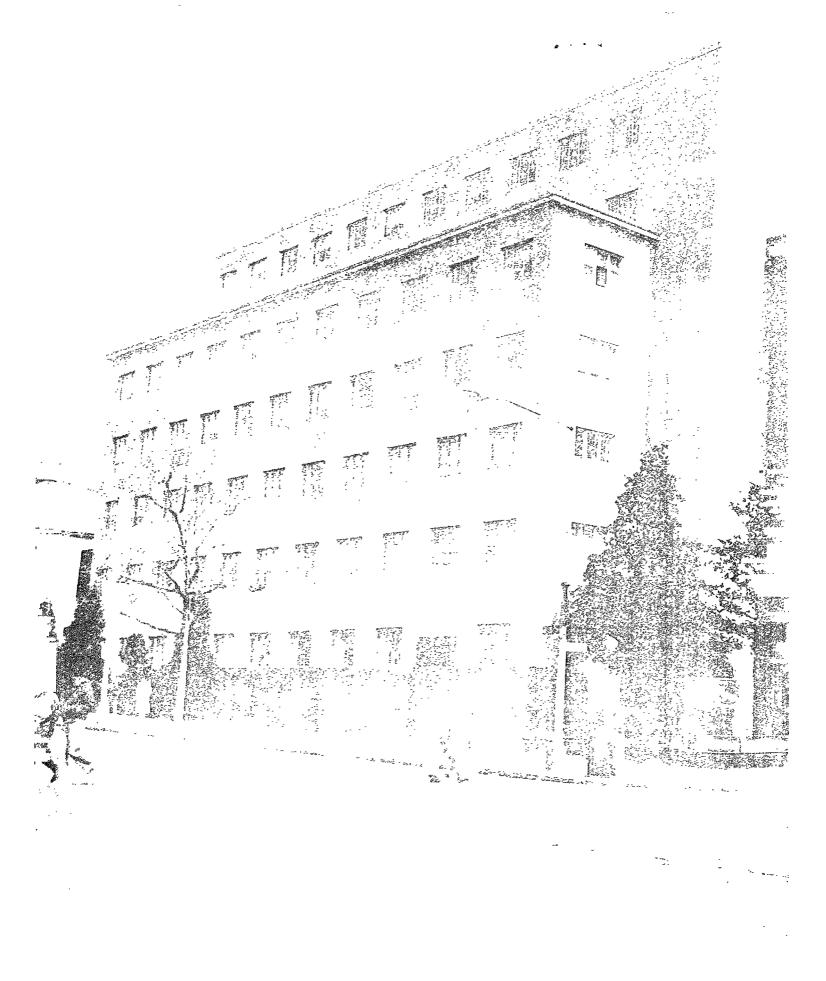


Winter 1983

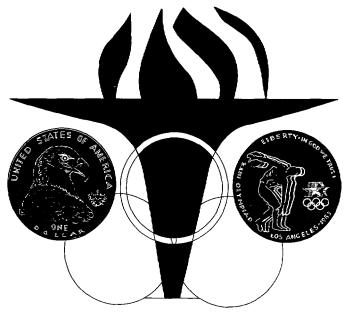
REVIEW



Why All the Fuss Over Olympic Coins? 02-342-02>350







Winter 1983

Why All the Fuss Over Olympic Coins?



Contents.

Volume 18 ■ Issue 1

1 From Our Briefcase

Accounting Update

President Signs Internal Control Legislation
GAO Staff Appointed to AICPA Committees and
Councils
Auditing/Accounting Compendium Available
Standards-Setting for Financial Reporting
Financial Management Issues of the 1980's
Auditing and Accounting Trends
Better Information Security Needed
Toward a Government-wide Procurement
Regulation
Regulatory Process—Puzzling to Public
Public Fund Digest

4 On Location

Comptroller General Announces
Organizational Changes
GAO's Honor Awards Ceremony
Toward the Office of the Future
Hispanic Heritage Celebration
National Association of Accountants Holds
Annual International Conference
Association of Government Accountants Gives
National Awards
San Francisco Regional Office Staffer Honored
Headquarters' Writer-Editor Staffs Meet with
Comptroller General
IPE Director Receives Myrdal Award
Third Annual Health Fair
Management Development Center Moves

8 Manager's Corner

11 Topics in Evaluation 025343

Carl E. Wisler

14 Why All the Fuss Over Olympic Coins?

Charles S. Cotton and Leonard W. Ellis 025344

16 Equal Pay—Fair Play
Margaret M. Armen 125345 21 The Future of Cost Accounting Standards Clark G. Adams and Ralph C. Dawn 025346 24 What "Type" Auditor Are You? Tom Pastore 28 Transportation for the Elderly and Handicapped: The Answer Remains Elusive 025347 Stephen L. Keleti and Joanne E. Weaver 30 "Shadowing" the Comptroller General Paul F. Math 22 At Home and Abroad in Paradise: GAO's Far East Branch 38 Is There a Greater Role for GAO in Analyzing the Defense Budget? 025348 George E. Breen, Jr. and Donna M. Heivilin 41 Report Writing—Fun or Drudgery? **Experiences on the Defense Budget Task** Werner Grosshans 25349 Force

43 "A Week's Worth"

Anne Rucker

45 Bookmark

William A. Broadus, Jr.

46 Bookmark

Laurie E. Ekstrand

47 Legislative Developments

Judith Hatter

025350

48 Reflections

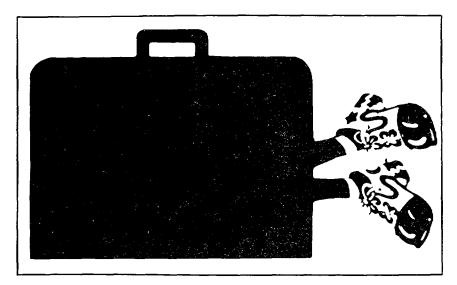
Diane E. Grant

- 52 GAO Staff Changes
- 55 New Staff Members
- **58 Professional Activities**

In the article "Nuclear Deterrence — A Short Primer for the Uninitiated" published in the Fall 1982 issue of the GAO Review (p. 15), the photographs of authors Robert P. Kissel, Jr. and Elmer Taylor, Jr. were mistakenly transposed. We apologize for the error.

_		
·		

From Our Briefcase



Accounting Update

President Signs Internal Control Legislation

President Reagan, on September 8, 1982, signed into law the Federal Managers' Financial Integrity Act of 1982, Public Law 97 – 255. The law establishes within each executive agency a continuous process for reviewing and monitoring the effectiveness of its internal control system. The head of each executive agency must prepare an annual statement on the quality of the agency's internal controls, any weaknesses in them, and plans for correcting those weaknesses.

Federal agencies will also now be required to establish internal controls in accordance with standards prescribed by the Comptroller General. GAO began refining and consolidating GAO's policies and standards of internal control in March 1982 (see GAO Review, Fall 1982, p. 1). That project will be a starting point for establishing a comprehensive set of internal control standards for the Federal Government.

In a related move, GAO has embarked on a major overhaul of the principles and standards it has established for Federal agencies. Under the Budget and Accounting Procedures Act of 1950, GAO is required to take the initiative in establishing accounting principles and standards for Federal agencies. Those principles and standards are contained in title II of

the GAO Policy and Procedures Manual for Guidance of Federal Agencies. The new legislation requires that each Federal agency include with its annual statement on internal controls a report on whether its accounting system conforms to GAO's principles, standards, and related requirements.

GAO Staff Appointed to AICPA Committees and Councils

Three GAO staff members have been appointed or reappointed to 3-year positions on four committees and councils of the American Institute of Certified Public Accountants (AICPA). Those members and the committee or council are Ronald J. Points, Special Advisory Committee on Internal Controls in the Federal Government; W.A. Broadus, Auditing Standards Advisory Council and the Management Advisory Services Practice Standards Committee; and Bruce K. Michelson, State and Local Government Accounting Committee.

Auditing/Accounting Compendium Available

A compendium of certain accounting and auditing pronouncements of interest to CPAs in Government has been prepared by the AICPA Committee on Members in Government. The listing includes pronouncements from the AICPA, GAO, the General Services

Administration, the Municipal Finance Officers Association, the Office of Management and Budget, and the Securities and Exchange Commission. Copies of the compendium are available for \$1 (postage and handling) by contacting Marti Dillon at (202) 872-8190.

To obtain more information on the items in Accounting Update or to suggest topics for future columns, call Bruce Michelson, (202) 275-6222.

Standards-Setting for Financial Reporting

Ed. Note:

In a recent speech, Joseph E. Connor, Chairman and Senior Partner of Price Waterhouse, the accounting firm, discussed a subject which is close to GAOers— improved financial reporting. With permission from Price Waterhouse, the Review staff abstracted some of Mr. Connor's thoughts. The following gives a private-sector perspective on standardssetting for financial reporting.

Inflation Accounting: Inflation accounting is one issue on the Financial Accounting Standards Board's agenda that could significantly change present reporting practices. Mr. Connor described the FASB's "Changing Prices" Statement (FAS 33) as a step forward in providing more meaningful financial reports, but he recommended that the impact of inflation be reported in the primary income statement. This would lead to a more meaningful reflection of profits, and the effective tax rates and dividend payouts on those profits, which would in turn result in better informed operating, investment, and fiscal decisions. Mr. Connor added that standards should be set to facilitate consistent reporting practices regarding the treatment of general purchasing power gains on net monetary liabilities.

Pension Accounting: He also addressed the controversy surrounding pension accounting. "There is a basic disagreement on whether a promise to pay employee pensions at some far-off future date creates a present liability—which ought to be recorded—or a present contingency—which need not be," he explained.

Mr. Connor's view is that pensions are a form of compensation, the cost of which should be allocated to the periods in which services are rendered.

Income Tax Accounting: Existing accounting principles require that tax benefits arising currently from timing differences be deferred by all commercial and industrial companies in all circumstances. According to Mr. Connor, reexamination of income tax accounting rules must consider the fact that some requlated industries would suffer serious economic setbacks if deferred tax accounting were to disappear without compensatory changes to rate structures. He proposed that any new standards issued should preserve present exceptions that recognize the unique circumstances of regulated industries.

Consolidations: Mr. Connor predicted that another important business topic likely to be debated in the near future is consolidations and the equity method. He felt that the predominant practice of not consolidating finance subsidiaries will surely come under intense scrutiny because of the increasing number of bankruptcy candidates.

Closure: Mr. Connor said that, although the standards-setting process may seem dictatorial, the FASB does offer democratic options by inviting businessmen to comment on proposed standards. Financial reporting has grown from adolescence to adulthood but has not yet reached responsible maturity. "That will come," he concluded, "only with our active participation—for the benefit of financial reports preparers and users alike."

For a reprint of Mr. Connor's speech, "Building a Better World of Financial Reporting," write or call Mr. Frederick M. Werblow, Price Waterhouse, 153 East 53rd Street, New York, New York 10022, (212) 371-2000.

Financial Management Issues of the 1980's

In a keynote address before the annual Professional Development Conference of the Association of Government Accountants held in Denver on June 14, 1982, Comptroller General Bowsher called for extensive change in Federal budget and accounting procedures to meet the rising costs of Government programs. He examined a number of important current financial management issues, together with his suggestions or existing action underway to resolve them, including

- the Federal budget process.
- accounting system approval.
- accounting principles and standards,
- · internal controls, and
- the single audit concept.

At the end of his speech, Mr. Bowsher emphasized how progress can be made on these important financial management issues:

First and foremost, we must be willing to exert necessary effort to effect positive change. Secondly, we must provide leadership and communication not only within the financial management community, but with policymakers, program managers, and the public.

A brochure of Mr. Bowsher's full speech is available from GAO's Office of Public Information, Room 7015, (202) 275-2812.

Auditing and Accounting Trends

In addition to Mr. Bowsher's speech, numerous auditing and accounting topics made up the proceedings at the Denver conference. Trends discussed in plenary sessions included

- the impact of government internal controls in the private sector,
- accounting for energy reserves from a State and local perspective,
- auditing in the 1980's.
- budgeting in the 1980's,
- self-development for the 1980's, and
- accounting for the 1980's.

The conference's 44 workshops elaborated on the messages conveyed by Mr. Bowsher and the other plenary session speakers. GAO staff members conducted the following workshops:

- Bill Broadus, AFMD, "Generally Accepted Auditing Standards for Federal, State, and Local Governments-The Yellow Book."
- Harry Havens, Assistant Comptroller General for Program Evaluation, "Government Budgetary Reforms: An Agenda for the 80's." (See Fall 1982 Review, p. 20, for a related article.)
- Virginia Robinson and Joe Donlon. AFMD, "Reflections on the New GAO Process for Approving Accounting Sys-
- Ron Points, AFMD, "Generally Accepted Accounting Principles-New Developments at the Federal, State, and Local Levels."

- Clark Adams, PLRD, "Cost Accounting Standards Implementation." (See this issues's article on Cost Accounting Standards.)
- Dave Bryant, OFM, "Financial Management Improvement—An Agenda for Managers.'

For details, contact GAO individual speakers or write for a summary of the conference proceedings to C. Hamilton, Editor, Government Financial Management TOPICS. Association of Government Accountants, 727 South Twentythird Street, Arlington, Virginia 22202.

Better Information Security Needed

Two 1982 GAO reports focused on issues within information systems development and design, including the vulnerability of information systems to fraud and other illegal practices. The Mission Analysis and Systems Acquisition Division (MASAD) and the Human Resources Division (HRD), in close coordination with the General Government Division and the Accounting and Financial Management Division, issued the complementary reports. MASAD reviewed Federalwide vulnerability problems, and HRD reviewed specific vulnerability problems at the Social Security Administration (SSA). Both reports reinforce a need for better information security within the Federal Government.

Federal agencies rely on computers and telecommunications networks to collect, process, store, and disseminate information-one of the Nation's most important and costly resources. However, inadequate protection of the computers, networks, and the information they contain leave them vulnerable to individuals who would use them for fraudulent. wasteful, abusive, and illegal purposes. MASAD and HRD stressed this point in their work.

MASAD reported that the potential for further misuse is growing as Federal systems become larger and more complex. Their report stated that:

which is responsible for Federal information policy, must clarify guidance concerning automated information security and take a stronger oversight role. Execu-

The Office of Management and Budget,

tive agencies must establish and maintain cost-effective administrative, physical, and technical controls to protect their automated information systems from misuse.

HRD, in its related report, presented examples of continuing systems-planning problems as well as misappropriation of funds at SSA. One example involved the U.S. Attorney's Office in Los Angeles, California. That office completed successful prosecution of an SSA field office employee who had fraudulently used the telecommunications network to steal more that \$104,000 in supplemental security income (SSI) benefits.

This was the third such case prosecuted by that office since 1980. In each case, incorporation of a personal identification number (PIN) into SSA's telecommunications software to identify all system users and to trace all system transactions probably would have prevented the crimes. At a minimum, PINs would have provided a means to quickly and easily identify and trace the fraud.

HRD's analysis of information security at SSA reinforced MASAD's Government-wide findings that central agencies must cooperate more to coordinate policies, principles, standards, and guidelines for information protection to substantially reduce the vulnerabilities and risks presently associated with executive agencies' automated information systems. Numerous specific recommendations in both MASAD's and HRD's reports amplified this theme.

Ed. note: In response to reader requests, the Review will continue to include items on ADP/information management fields. For details on the reports discussed above, call Harold Podell in MASAD, (202) 275-1811, or Dave Kent in HRD, (301) 597-3010. Copies of "Federal Information Systems Remain Highly Vulnerable to Fraudulent, Wasteful, Abusive, and Illegal Practices" (MASAD – 82 – 18, Apr. 21, 1982) and "Examination of the Social Security Administration's (SSA's) Systems Modernization Plan" (GAO/ HRD - 82 - 83, May 28, 1982), may be obtained from GAO Documents Distribution, room 1518, (202) 275-6241.

Toward a Governmentwide Procurement Regulation

Three Federal agencies have taken a major step toward achieving a single Government-wide procurement regulation. The Department of Defense, the National Aeronautics and Space Administration (NASA), and the General Ser-

vices Administration have signed a Memorandum of Agreement with respect to a forthcoming Federal Acquisition Regulation (FAR). (See OMB 82-17.) This agreement represents nearly 4 years of agency work to consolidate and simplify the agencies' regulations into one FAR. It includes procedures for coordinating with the private sector on the new revised procurement regulations by requiring publication of the FAR and its subsequent revisions in the Federal Register prior to effective dates. The FAR is intended to replace current Federal Procurement Regulations, most civil agency procurement regulations, the majority of the Defense Acquisition Regulations, and the NASA Procurement Regulations.

During 1982-83, two groups familiar with defense and civilian procurement. the Defense Acquisition Regulation Council and the Civilian Agency Council, will review individual portions of the FAR and will work to bring the current regulations into line with them. After the FAR's implementation, now planned for October 1, 1983, the councils will handle cases arising out of FAR provisions, propose changes to the FAR, and develop separate operating guidelines. For additional information, contact the Office of Management and Budget's Public Affairs Office, (202) 395-3080, or GAO's Bob Bontempo, AFMD, (202) 275-4285.

Regulatory Process— Puzzling to Public

Reviewing regulations and interviewing their authors is often an auditor's role. But according to *The Washington Post*, a Gallup Poll conducted for the League of Women Voters' Education Fund shows that many outside the Government aren't sure where the regulatory process begins.

Ten percent of those polled said that the courts wrote Federal regulations, 47 percent said the Congress wrote them, and only 17 percent correctly answered that the executive branch has that responsibility. Asked which were written first, laws or regulations, 29 percent said laws; 28 percent, regulations; and 14 percent said both are written at the same time

Interested readers may request a copy of the regulatory poll or more information from the League's Government Voters Service, (202) 296-1770.

Public Fund Digest

The International Consortium on Governmental Financial Management, an international grouping of organizations and people involved in the management of public funds, has recently published the *Public Fund Digest*. The *Digest* brings together in one journal some of the best articles published by the Consortium's membership, enabling all to benefit from the exchange of perspectives, information, and new concepts in governmental financial management.

The Consortium represents over 250,000 financial managers, accountants, and auditors from all parts of the world. It encourages its members to promote a better understanding of professional financial management among public officials through, for example:

- publishing the results of research and training,
- providing an international clearinghouse of information relevant to governmental financial management, and
- collaborating on financial management technical assistance programs with developing countries.

The areas which constitute the disciplines of governmental financial management—accounting, auditing, budgeting, data processing, debt administration, retirement administration, and treasury management—provide the general frame of reference for the programs and operations of the Consortium.

The Public Fund Digest, Volume I, No. 1, contains articles such as "Auditing in the Americas—What the Future Holds," by Elmer Staats, "Accounting to Parliament," by Joel Barnett, and "International Dimensions of Governmental Financial Management..." by James Hamilton. Readers are invited to request complimentary copies, usually \$3.00 each, from Diane Grant, (202) 275-5534.

Second quote above may be attributed to Donald E. Day, senior associate director in MASAD.

[&]quot;No passion in the world is equal to the passion to alter someone else's draft."

H.G. Wells

[&]quot;Nor is there greater satisfaction in the world when one doesn't find a need to."

On Location.

Comptroller General Announces Organizational Changes

On October 1, 1982, several GAO organizational changes went into effect. Comptroller General Bowsher also established several Assistant Comptroller General positions, outlined in this issue's "GAO Staff Changes."

The changes are shown on GAO's current organization chart.

GAO's Honor Awards Ceremony

On Stage

The U.S. Marine Band and the Joint Armed Forces Color Guard opened this year's Office-wide Honor Awards Ceremony, held at 6:00 p.m. on October 14 in the Rayburn House Office Building. Over 50 awards in 6 categories were presented, including best articles published in the GAO Review, Equal Employment Opportunity, Meritorious Service, Distinguished Service, the Comptroller General's Award, and the GAO Public Service Award.

After introductory remarks by MASAD director Walton H. Sheley, who served as this year's awards committee chairman, Comptroller General Bowsher spoke. He noted that this was his second awards ceremony as Comptroller General—his first after a full year in office—and that, "in honoring the few, we pay tribute to the many who work day in and day out to accomplish the important role of the GAO."

Keynote speaker Mortimer Caplin, a partner in the law firm of Caplin and Drysdale, Washington, D.C., and former Commissioner of the Internal Revenue Service, echoed Mr. Bowsher's theme. Caplin stated that the awards process is a consistent reminder of a remarkable group: the able and dedicated people who serve in the career Federal service. The awards process, he said, recognizes the crucial role the Federal servant plays in meeting the needs of our political and social order.

Mr. Caplin pointed out that Vietnam, Watergate, and the troubled economy all contributed to unfair and unwarranted criticisms of the career service. While

admitting that some civil servants do fit the worst stereotype, Mr. Caplinsaid that, during his years as IRS Commissioner, he was impressed with the honesty, loyalty, and dedication of the Federal worker.

"It is particularly important," said Mr. Caplin, "to put these criticisms in their proper setting. That's why we need events like awards ceremonies to recognize excellence and special achievement, to help restore the public's faith in the quality and integrity of Government, and to say 'thank you' for a job well done."

Programs listing the GAO awardees and their achievements may be obtained from Deborah Curtis, (202) 275-3117.

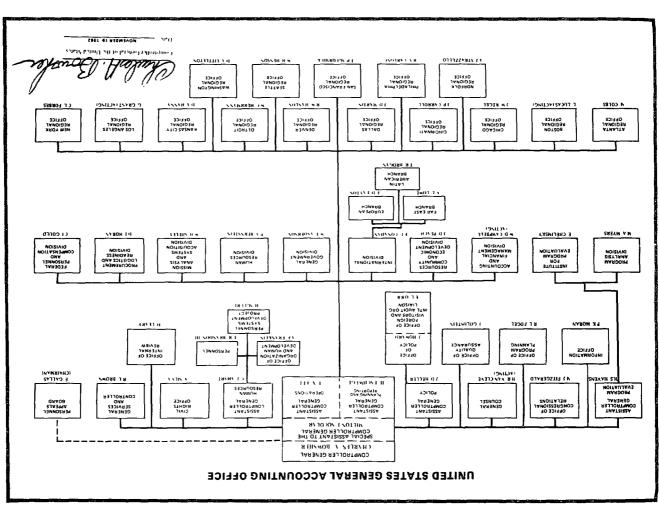
Behind the Scenes

In the midst of the preparations for this year's awards ceremony, the *Review* interviewed Personnel's Deborah Curtis, the Awards Committee's executive secretary, for a behind-the-scenes view. Ms. Curtis was responsible for coordinating the activities that made the program run smoothly, from composing the official invitations to locking the last exit door. (Ms. Curtis has been with GAO since 1980 and has an additional 8 years of experience in personnel work with the Smithsonian Institution.)

Deborah shares her experiences in preparing for the ceremony:

After notifying divisions and offices of the award recipients, my next step was finding a suitable place for the ceremony. We anticipated a crowd of 400, and I finally found a site at the Rayburn House Office Building. I was impressed with the space and the reasonable refreshment costs, but we needed a congressional sponsor for our event. After a few phone calls, Rep. Ed Jones agreed to be our sponsor.

All the major details seemed to be in order, when, about 2 weeks before the ceremony, I received a call from a member of the Rayburn Building's administrative staff. She was requesting that a list of names of all the guests at the ceremony be provided to the Capitol Police. In the past, we had encouraged all GAOers to attend, so we felt it would be virtually impossible to get an accurate list of attendees prior to the night of October 14.



division, every regional office, and many suboffices and larger audit sites now have communicating workstations that can transmit data and text in a matter of minutes to any other office in GAO. This process, formerly used by some GAO offices, in that the material must first be offices, in that the material must first be offices, in that the material must first be disks" and be printed at the receiving end in identical form, without degradation in quality or appearance.

Letters, records of interview, briefing documents, contact memorands, workpaper summaries, report chapters, or whole reports now can be readily sent in electronic form from one office to another. Changes can be made quickly at the workstations, and the revised material workstations, and the revised material time. Mumeric and columnar data as well as some graphics will transmit just as some graphics will transmit just as easily as text. This will provide the basis for a whole new way of doing business in for a whole new way of doing business in estiliciency with which information can be efficiency with which information can be efficiency with which information can be

have noticed new equipment throughout GAO. You may have heard it referred to as the Micom, the Philips, or simply as EWS, an acronym for Electronic Workstation. Whatever the name, it's GAO's first major step into the area of high-technology office automation, an intriguing though sometimes confusing world. Pat Patterson of the Atlanta Regional Office, Chairman of the EWS Professional User's Group, explained some of sina aspects for the Review:

"The blue boxes with red flashing lights which have cropped up next to our new electronic workstations are important devices in providing GAO with up-to-date communications. Called modems (short for modulator/demodulator), these boxes convert digital data from our workstations into audio (analog) signals which can be transferred over telephone lines.

For the first time, GAO has the capability to send data and text in electronic form to and from any of our offices in the United States. Every programming

To solve this problem, we compromised. The administrator agreed to waive the requirement of informing the Police of guests' names if each attendee showed a printed invitation at the door. We quickly announced this in the Management News.

When we interviewed Ms. Curtis, if was 1 week before the ceremony. The U.S. Marine Band and Joint Armed Forces Color Guard had been confirmed. The official GAO photographers and the caterer were prepared. The ceremony programs and award plaques had all been proofed. The annual awards ceremony was ready and set to go. The Review extends appreciation to Ms. Curtis, her bettends and Awards Committee members for their hard work on this major Ders for their hard work on this major Ders for their hard work on this major

Toward the Office of the Future

Over the last 3 months, you probably



exchanged among offices and sites all over the country. In fact, it is now possible for GAO staff at any telephone in the United States to communicate data and text to and from our workstations by using portable terminals (equipped with built-in modems).

Another advantage of this new network is that, after being set up to communicate, the stations can receive data unattended. They can also send or receive information "in background" while the screens, keyboards, and printers are being used for entirely unrelated purposes. This is possible because the data is sent and received from "floppy disks."

Floppy disks, which have replaced the cassette tapes previously used with our Lexitrons, look like 45 rpm phonograph records enclosed in 8-inch protective jackets. When a floppy disk, jacket and all, is inserted into the station, a drive inside the console rotates the disk at high speed while information is plucked off at the operator's command.

Each floppy disk has a capacity of 250,000 characters, or about 127 pages of text, and any or all of the material can be transmitted via the modems over telephone lines. This capability is one of a variety of technological advances which will help move GAO from a "paper-bound" environment toward becoming an "office of the future."

Future issues of the Review will highlight various aspects of this system.

Hispanic Heritage Celebration

GAO's program marking Hispanic Heritage Week included speeches, music. and an important announcement by Comptroller General Bowsher. He chose the occasion to describe a stepped-up program to hire Hispanic and Asian-Americans for both professional and administrative positions. During his talk, Mr. Bowsher noted that in fiscal year 1983-84, he would like GAO to strive toward the goal of employing 15 percent Hispanic and 5 percent Asians among both headquarters and regional co-opsemployees who are cooperative education students. To the extent that GAO is able to make permanent appointments beyond the conversion of co-ops, he thought that hiring goals of 10 percent Hispanics and 5 percent Asian were challenging yet realistic, given Hispanic and Asian representation in the labor market. Mr. Bowsher made his remarks after an introduction to the morning's program by Rosa Mercado Johnson, Hispanic Employment Program Manager, International Division, and a welcoming speech by Alex Silva, director, Civil Rights Office.

Highlights of the program include the Hispanic music of the Trio Nuevo Horizonte, a group of local professionals who also work together a musicians to share cultural awareness through their performances, followed by the keynote address of Mr. Tony Bonilla, Mr. Bonilla is the president of the League of United Latin American Citizens (LULAC), the Nation's largest Hispanic membership organization, LULAC was established in 1929 to improve the status of Hispanic persons in the United States. Mr. Bonilla endorsed the Comptroller General's recruitment and hiring initiatives but pointed out that many of the Nation's businesses and governments base their dealings with Hispanics on false images created by the media. He concluded by insisting that "civil rights is not a negotiable item" and urged employers to provide Hispanics with their fair share of business opportunities and decisionmaking positions. A sizeable audience of GAOers applauded his remarks.

Additional programs from the September 16, 1982, program may be obtained from GAO, room 4063.

National Association of Accountants Holds Annual International Conference

In June 1982, numerous GAO staff members participated in the National Association of Accountant's annual inter-

national conference. For the first time in 18 years, the conference was held in Washington, D.C.

Frank Subalusky of the Resources, Community and Economic Development Division headed the planning of the event. He noted that the conference was designed to provide a national perspective on professional development and education, not only for accountants, but also for auditors and many other people interested in financial management, productivity, and communications.

Conference sessions are available on cassette tapes, according to Mr. Subalusky. These include the keynote address by Donald T. Regan, Secretary of the Treasury, as well as talks on the accounting profession in the Arab world, small business computers, and the economy. For more information and a complete listing of sessions, call Frank Subalusky, (202) 443-8691, or Minute Tape, Inc., (213) 997-1149.

Association of Government Accountants Gives National Awards

During its mid-June 1982 Professional Development Conference in Denver, the Association of Government Accountants (AGA) awarded two of its top national awards to recipients from GAO.

Ron Points, AFMD, received one of three distinguished leadership awards for his work in fostering improved accounting standards. AGA awarded its Robert W. King Memorial Award posthumously to Don Scantlebury "for his outstanding contributions and dedicated service to the Association and to the profession, of such significance as to have brought national and international prestige to the Association of Government Accountants." Mrs. Scantlebury accepted the award.

San Francisco Regional Office Staffer Honored

Clifteen Ann Amador of GAO's San Francisco Regional Office (SFRO) was honored in September with a nomination for the 1982 Federal Clerical Employee of the Year award. Each year the San Francisco Bay Area Federal Executive Board recognizes outstanding Federal employees in several categories. Ms. Amador, as one of the nominees, was cited by SFRO manager Tim McCor-

mick for her "exceptional professionalism, personality, dedication, and leadership qualities (that) have earned her the trust and respect of GAO's management, audit, and administrative staffs."

In addition to her role as a management assistant responsible for tracking audit assignments and staffs, she is the administrative representative on the region's Equal Employment Opportunity Advisory Council and was in charge of the office's Combined Federal Campaign.

Headquarters' Writer-Editor Staffs Meet with Comptroller General

A luncheon meeting with the Comptroller General highlighted the July 23 conference for headquarters writer-editors and editorial assistants. The main agenda item was the Comptroller General's ninemember Reports Task Force, a group established in June 1982 to research the report-writing process. Milt Socolar, Special Assistant to the Comptroller General, and Ira Goldstein, who heads the task force, were present to answer conference participants' questions. Other agenda items included talks by John Heller, Assistant Comptroller General; Patricia Moran, Information Officer; a discussion of the new Editorial Style Manual soon to be issued; and a briefing on the new GAO course, "Managing the Review and Writing Process," which includes a unit on the functions of writer-editors.

The luncheon meeting was the first of its kind in GAO's history. It gave Mr. Bowsher and his staff of writer-editors (most of whom were meeting him for the first time) the opportunity to share their thoughts on a much-discussed subject within the agency: the quality of writing. Mr. Bowsher expressed his concerns about the agency's need to improve the quality and timeliness of its reports and the need for employees who can write well. He emphasized the importance of writer-editors within GAO and assured them that no change in their operations was necessary at that time.

Writer-editors talked with authority about some of their successful and not-so-successful experiences with report writing and processing. They also offered their assistance in promoting the task force's efforts.

This 1-day conference was the third of many that regional and divisions' writer-

editors will held annually. It provides an excellent forum for exchanging information and for presenting concerns to management.

IPE Director Receives Myrdal Award

On October 28, 1982, Dr. Eleanor Chelimsky, director of GAO's Institute for Program Evaluation (IPE), received the Evaluation Research Society's 1982 Myrdal Award for Government "in recognition of her leadership in building a distinguished and highly regarded program evaluation unit within the U.S. General Accounting Office."



The Evaluation Research Society (ERS) has been giving annual awards in honor of Gunnar and Alva Myrdal and Paul Lazarsfeld, exemplary social scientists, to government executives, evaluators, and researchers who have made distinguished leadership and research contributions to evaluation research. (Former Comptroller General Staats has also received this award.)

Dr. Chelimsky was selected this year from among a large number of nominees. Her award was presented at the ERS annual meeting in Baltimore.

See LOCATION, p. 49

Manager's Corner

The Management Development Program at GAO focuses on strengthening management practices so that GAO can accomplish its goals and objectives more effectively, efficiently, and economically. This issue of "Manager's Corner" presents the theory and pracice of managerial training and explores its effect on both public and private instutions.

Tom Franklin, director of OOHD, asked members of OOHD's Management Development Unit to review articles on managerial training. His introduction and their summaries accompany a bibliography on managerial training and a general bibliography on selected management topics.

GAO's Management Development Program is designed to improve managerial performance at GAO, to develop programs for managers which will prompt them to improve their skills, and to ensure a pool of highly qualified candidates for future managerial and executive positions. Management literature stresses the need for managers to possess skills in order to successfully accomplish the goals of the organization. Well-trained managers help an organization to run smoothly; they know how to manage their staffs in order to provide for continuity in the organization; and they recognize the importance of continually developing and upgrading their own skills to meet changing expectations.

Training and development for these skills are complex, but as the following articles suggest, an organization must plan for the use of its human resources.

Tom Franklin, Director, OOHD

(Please call Kathy Karlson at (202) 272-3060 for questions or suggestions about "Manager's Corner.")

Anderson, Brad and Jerry I. Porras. "Improving Managerial Effectiveness Through Modeling-Based Training." Organizational Dynamics, 9, No. 4 (Spring 1981), 60-77.

The authors describe a training program which solves some of the problems in transferring learning to the job. They suggest that managerial training has often failed to produce change because trainers have (1) tried to change behavior by teaching theory, (2) been unable to convert classroom learning to job behavior, (3) failed to diagnose for-

mally their efforts, and (4) lacked reward systems for changed behavior. In a forestry company with 700 unionized employees, trainers used a "modeling-based" training design to solve supervisory problems which were lowering productivity, and they hoped to solve some of the problems with transferring learning to the job.

After supervisors had indicated the top ten supervisory problems (such as handling employee complaints or getting commitments to performance goals), the trainers taught a simple design of identifying the problem, solving it, and following up. They did so in 7 weekly workshops of 6 hours which middle managers taught to supervisors and employees. Their classroom design was based on social learning theory. Its steps follow:

- Present the concepts.
- Demonstrate the successful use of the skill.
- Rehearse the skills in front of the class.
 (This is different from role-play because the skill is specific and must be perfected.)
- Discuss problems and strengths; reinforce the skill.
- Make contracts with class to transfer the skill to a specific problem on the job.
- Follow up at the next session to see if the skill worked.

Trainers found that by using these methods, they were able to change work behaviors, decrease absenteeism, and even after 8 months, to increase productivity. (Reviewed by Kathy Karlson, Education Specialist)

Benford, Robert J. "Found: The Key to Excellent Performance." *Personnel*, 58, No. 3 (May/June 1981), 68-77.

This article describes one firm's search for the key to why certain supervisors and work groups consistently achieve superior productivity as well as outstanding employee satisfaction. The results of an inquiry indicated that the more successful supervisors were able to increase both productivity and employee job satisfaction by establishing effective communication with their subordinates and getting them to see the relationship between the organization's goals and their work units' outputs.

The author discusses the factors affecting productivity and job satisfaction. To achieve productivity, the organization

must (a) communicate its needs to employees in terms of expected behaviors, (b) monitor overall performance in relation to its needs, and (c) communicate individual performance results to employees and follow up accordingly with praise, coaching, or remedial action. To achieve job satisfaction, employees must know (a) what is expected of them, (b) what they are accountable for, (c) the acceptable standard of performance, and (d) how they are performing in relation to the sets of expectations.

To meet the organization's need for each employee to see a clear relationship between performance and the organization's ultimate goals, the firm developed a communication-based management system. This system is organized around the "job model," which specifies the results of activities as they relate to the organization's needs. The remainder of the article discusses in some detail how to formulate the job model and how the model can be used as a tool for managing individual work units.

(Reviewed by Sande Lehrer, Education Specialist)

Mahoney, Francis X. "Targets, Time and Transfer: Key to Management Training Impact." Personnel, 57, No. 6 (November-December 1980).

Dr. Mahoney reasons that training has impact if it is organized as a half-day working session aimed at a particular job target. This training design requires, first, that managers identify specific problems or organizational topics which need attention, and second, that managers schedule meetings with decisionmakers on the topic to plan, to solve problems, and to coordinate. If more time is needed, another meeting can be scheduled to gather more data or test ideas.

This process is called "management on purpose." Managers reconvene up to eight times a year so that management information can be applied by practicing managers. At each working session, credible managers present management theory information relevant to the target issue. Transfer of learning is accomplished because managers go back to the job with new approaches and solutions and the conviction needed to discuss them. Management "on purpose" depends on five elements in the training:

- Accountability—Managers talk with their superiors and subordinates before and after the working session to set purposes and to determine how to carry out action plans.
- Leadership—Sessions are led by significant managers of the organization.
- Design—Sessions use the management skills of diagnosing, analyzing, and developing, not skills such as labeling, defining, and classifying.
- Preparation—Skills or information needed for the working session are acquired by presession work.
- Follow-up—To facilitate accomplishing action plans, session leaders are debriefed by the managers responsible for the organizational target.

These elements support the training and transfer of learning. (Reviewed by Janet Coffin, Employment Development Specialist)

Main, Jeremy. "The Executive Yearn to Learn." Fortune, 105, No. 9 (May 3, 1980), 234-248.

Mr. Main discusses the rapid growth of management education and some of the issues in management education. He states that the need for management education in this ever more complex world is so diverse and changing that it has not yet been measured as a whole. The no profit American Management Association, the largest provider of management education, has tripled its annual offerings since the mid 1970's. Profitmaking firms are also growing fast, some by over 30 percent a year, and many universities and colleges are expanding their management education programs. The primary issue in management education is the assessment of its benefits. These benefits are difficult to identify because most companies make no attempt to track the before and after performances of their executives. Mr. Main states that short seminars receive the most criticism and that the benefits of longer courses at the better-known business schools are accepted as a matter of faith by the corporations paying the bills. To overcome complaints that training programs are often irrelevant, some management consulting firms have developed programs especially designed for the top management of a particular organization. While they are the most expensive type of management education, these programs are probably the most effective and seem to be the most pleasing to clients. (Reviewed by Donald Smart, Consultant)

Puffer, Sheila M. "Inside a Soviet Management Institute." *California Management Review*, 24, No. 1 (Fall 1981), 90-96.

In reviewing a Soviet management institute, Ms. Puffer states that, over the past decade and a half, the gross inefficiencies of the Soviet economic system—wasted resources, unfulfilled production quotas, low productivity, inferior product quality—have changed little. What has changed is the Soviets' attitude towards managers who cope with these problems: the Soviets have designed their own executive development program.

This "upgrading-of-skills program" was founded in 1965 as part of the changing economic emphasis on management of the national economy. The program's goal is "to equip managers of the national economy with knowledge and skills in the field of management, economics and organization of production, computers, and automated systems of management necessary for contemporary managers." Participants, mostly senior managers and their assistants, attend the course on a full-time basis for 3 months. The class is divided into four subgroups, which allows participants to be grouped with peers from their sector of the economy. The predominant instructional method is lecture, with the supplement of two "concrete situations" (case studies) and management simulations. Major lecture topics include general management, industrial issues, and politics and planning.

Upon completion of the program, participants are expected to prepare and present a 60-page report in which they analyze a current problem in their enterprise and integrate the material learned in the course. The papers are to address any of the following general issues: the increase of labor productivity, the reduction of operating costs, the economical use of raw materials, or the improvement of management systems. (Reviewed by Marty Herrin, Employee Development Specialist)

Truskie, Stanley D. "Guidelines for Conducting In-House Management Development." *Personnel Administrator*, 26, No. 7 (July 1981), 25-27.

The author suggests that for an effective management development program, the management development consultant must

· overcome the tarnished image of

in-house programs as being glorified charm schools and

 select and build a program of high quality and high organizational acceptance and impact.

The author's 12 years of experience suggest to him that unsuccessful in-house programs typically have the following characteristics: the content is more of an indoctrination than the development of knowledge and skills, the content has not been altered in years, one individual in the organization has primary ownership. and top management has little or no interest in the program and provides no positive reinforcement of it. Overcoming these problems depends on the involvement of all levels of management and of pertinent staff, what the author calls an increased usage of the collective term "we."

The author suggests other steps to ensure acceptability, steps such as choosing the appropriate learning mode, custom-designing course segments, and periodically reviewing course content. His main point is that top management support and commitment are the first logical steps in the process of designing a management development program. (Reviewed by Cindy Clark, Supervisory Employee Development Specialist)

Management Development and Training

Anderson, Brad and Jerry I. Porras. "Improving Managerial Effectiveness Through Modeling-Based Training." Organizational Dynamics, 9, No. 4 (Spring 1981), 60-77.

Benford, Robert J. "Found: The Key to Excellent Performance." Personnel, 58, No. 3 (May/June 1981), 68-77.

Bresnick, David. "University/Agency Collaboration in Management Development Efforts." *Public Administration Review*, 41, No. 6 (November-December 1981), 683-686.

Clement, Ronald W. "Evaluating the Effectiveness of Management Training: Progress During the 1970's and Prospects for the 1980's." Human Resource Management, 20, No.4 (Winter 1981), 8-13. Condeni, Tony. "Building Skills Through

Self-Awareness." Management World, 11, No. 5 (May 1982), 33-34.

Daly, Andrew. "Management Development Gears for the 80's." Training Development Journal, 34, No. 12 (December 1980), 88-92.

Hodgson, Vivien, and Michael Reynolds.

- "The Hidden Experience of Learning Events: Illusions of Involvement." *Personnel Review*, 10, No 1 (1981), 26-29.
- Jennings, Eugene E. "How to Develop Your Management Talent Internally." Personnel Administrator, 26, No. 7 (July 1981), 20-23.
- Kelsey, Harry, Jr. "Practicing What They Preach: Successful Management Development Programs." Business Horizons, 23, No. 6 (December 1980), 3-6.
- Langdon, Danny G. "The Individual Management Development Program." Training and Development Journal, 36, No. 3 (March 1982), 78-82.
- List, Charles E. "Behavior Modeling: Linking Theory With Practice." *Training*, 19, No. 1 (January 1982), 28-30.
- Mahoney, Francis X. "Targets, Time and Transfer: Keys to Management Training Impact." *Personnel*, 57, No. 6 (November-December 1980), 25-30.
- Main, Jeremy. "The Executive Yearn to Learn." *Fortune*, 105, No. 9 (May 3, 1982), 234-236, 240-244, 248.
- Nichols, Leland C. and Joseph Hudson. "Dual Role Assessment Center: Selection and Development." *Personnel Journal*, 60, No. 5 (May 1981), 380-386.
- Owens, James. "A Reappraisal of Leadership Theory and Training." Personnel Administrator, 26, No. 11 (November 1981), 75-84, 98-99.
- Parke, Lauck E. "Management Development Education in the Public Sector." New England Journal, 8, No. 1 (Fall 1981), 65-74.
- Prekopenko, J. and Lester R. Bittel. "A Modular Course Format for Supervisory Development." *Training and Development Journal*, 35, No. 2 (February 1981), 14-22.
- Puffer, Sheila M. "Inside a Soviet Management Institute." *California Management Review*, 24, No. 1 (Fall 1981), 90-96.
- Rehder, Robert R. "American Business Education—Is It Too Late to Change?" Management Review, 23, No. 2 (Winter), 63-71.
- Rosenthal, Steven M. and Bob Mezoff. "Improving the Cost/Benefits of Management." *Training and Development Journal*, 34, No. 12 (December 1980), 102-106.
- Seiler, Clarence J. "Let's Put 'Management' Into Management Training." Training and Development Journal,

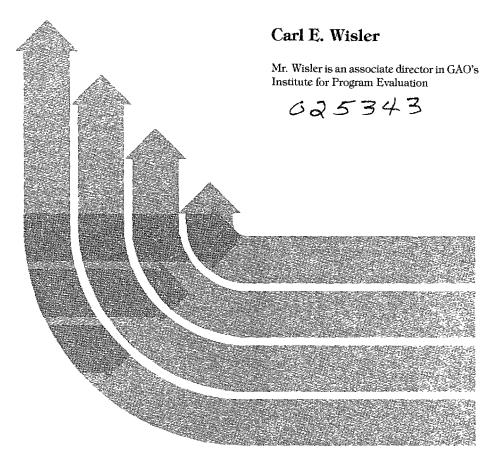
- 35, No. 9 (September 1981), 68-70. Siegel, S.R. "Improving the Effectiveness of Management Development Programs." *Personnel Journal*, 60, No. 10 (October 1981), 770-773.
- Treadgold, Rich. "At Last a Training Program That Works." Personnel Journal, 61, No. 2 (February 1982), 110-112.
- Truskie, Stanley D. "Guidelines for Conducting In-House Management Development." Personnel Administrator, 26, No. 7 (July 1981), 25-27.
- Truskie, Stanley D. "Getting the Most From Management Development Programs." *Personnel Journal*, 61, No. 1 (January 1982), 66-68.
- White, Michael C. "A Critical Review of Female Performance Training and Organizational Initiatives Designed to Aid Women in the Work-Role Environment." Personnel Psychology, 34, No. 2 (Summer 1981), 227-248.

Selected Articles from Management Journals

- Bobbe, Richard and Robert Schaffer. "Want Productivity Improvement? Manage It!" Administrative Management, 43, No. 8 (August 1982), 22-25, 78.
- Bozeman, Barry and James Massey. "Investigation in Policy Evaluation: Some Guidelines for Skeptical Public Managers." Public Administration Review, 42, No. 3 (May-June 1982), 264-270.
- Clarke, Richard M. "Middle Management Today: Who's Calling the Shots?" Management Review, 71, No. 7 (July 1982), 21-25.
- Cooper, Cary L. and Marilyn J. Davidson. "The High Cost of Stress to Women Managers." *Organizational Dynamics*, 10, No. 4 (Spring 1982), 44-53.
- Davis, Stanley M. "Transforming Organizations: The Key to Strategy." *Organizational Dynamics*, (Winter 1982), 64-80.
- DeLong, Thomas J. "Re-examining the Career Anchor Model." *Personnel*, 50, No. 3 (May-June 1982), 50-61.
- Driver, Russell W. and Ronald A. Ratliff. "Employers' Perception of Benefits Accrued from Physical Fitness." Personnel Administrator, 27, No. 8 (August 1982), 21-26.
- Fielden, John S. "What Do You Mean You Don't Like My Style?" *Harvard Business Review*, 60, No. 3 (May-June 1982), 128-138.

- Forbrum, Charles. "Conversation with Reginald H. Jones and Frank Doyle." Occupational Dynamics, (Winter 1982), 42-63.
- Forbes, J. Benjamin and James E. Piercy. "Industry Differences in Chief Executive Offices." *MSU Business Topics*, 29, No. 1 (Winter 1982), 17-29.
- Garretson, Pamela and Kenneth S. Teel. "The Exit Interview: Effective Tool or Meaningless Gesture?" *Personnel*, 59, No. 4 (July-August 1982), 70-77.
- Gilmore, Carol B. and William R. Fannin. "The Dual Career Couple: A Challenge to Personnel in the Eighties." *Business Horizons*, 25, No. 3 (May-June 1982), 36-41.
- Kaye, Beverly L. and Shelly Krantz. "Preparing Employees: The Missing Link in Performance Appraisal Training." Personnel, 59, No. 3 (May-June 1982), 23-29.
- Kreitner, Robert. "Personnel Wellness: It's Just Good Business." *Business Horizons*, 25, No. 3 (May-June 1982), 28-35.
- Latham, Gary P. and Herbert A. Marshall. "The Effects of Self-Set, Participatively Set and Assigned Goals on the Performance of Government Employees." Personnel Psychology, 35, No. 2 (Summer 1982), 399-404.
- Mahoney, Francis X. "Team Development, Part 6: Variations of Procedure Meetings." *Personnel*, 59, No. 4 (July-August 1982), 64-69
- Mooney, Marta. "Organizing for Productivity Management." *National Productivity Review*, No 2 (Spring 1982), 141-150.
- Rainey, Glen W. and Laurence Wolf. "The Organizationally Dysfunctional Consequences of Flexible Hours: A General Overview." *Public Personnel Management*, 11, No. 2 (Summer 1982),165-175
- Rohr, John A. "The Problem of Professional Ethnics." *The Bureaucrat*, 11, No. 2 (Summer 1982), 47-50.
- Sailer, Heather R., John Schlacter, and March R. Edwards. "Stress: Causes, Consequences and Coping Strategies." *Personnel*, 59, No. 4 (July-August 1982), 35-48.
- Tomkiewicz, Joseph and O.C. Brener. "Organizational Dilemma: Six Differences in Attitudes Towards Women Held by Future Managers." *Personnel Administrator*, 27, No. 7 (July 1982), 62-65.

Topics in Evaluation



This issue's topic is causality.

People once believed that lightning was the work of the devil and that a thunderstorm could be dispelled by ringing the bells in a church steeple. Such a desirable effect was supposedly caused by the sound of the bells agitating the air and breaking up the devil's fiery exhalations. This causal theory held sway until Benjamin Franklin's experiments with electricity led him to "invent" and demonstrate the effectiveness of the lightning rod. But before Franklin's insight, hundreds of bellringers in rain-drenched steeples were electrocuted.

Causality exhibits an odd duality. In our daily living, we constantly behave in accord with our beliefs about cause and effect, frequently without conscious deliberation about our actions. And yet, if asked how we know that one event is caused by another, we may be hard-pressed to explain our reasoning precisely.

GAO addresses many questions about cause and effect which are on a grander scale than the questions posed in daily living. The following are just a few examples of questions GAO examines:

- What accounts for the high unemployment rate of teenagers?
- Does the Department of Agriculture's farmer-owned grain reserve program increase grain inventories?
- Did passage of the Natural Gas Act of 1978 cause higher gas prices?

Regardless of scale, the principle is the same: we need information about the relationship between cause and effect to guide rational behavior. We'll use one of these questions—the one about natural gas prices—to explore the nature of causality, hoping to avoid the fate of medieval bellringers.

Establishing Cansality

What do we have to do to show cause and effect? We must establish three

conditions: covariation, time order, and nonspuriousness. Suppose that we had measured natural gas prices at a number of places around the country immediately before and 6 months after the passage of the Natural Gas Policy Act (NGPA). We want to see if this kind of data will allow us to determine if the two phenomena—presence or absence of NGPA and variation in gas prices—are causally related.

Covariation, which literally means that two phenomena vary together, can take several forms. Consider two factors, X and Y, which we can measure. When large values of X tend to be accompanied by large values of Y, that is covariation. So is the tendency for larger values of X to be associated with smaller values of Y and vice versa.

Covariation is also applicable when we can't measure the phenomena. For example, if event A tends to occur when event B occurs, and A tends not to occur when B does not occur, we describe the relationship as covariation.

If our investigation shows, in a statistically convincing way, that natural gas prices tend to be low in the absence of NGPA (the before measurement) and in the presence of NGPA (the after measurement), the policy act and the prices exhibit covariation. We would thus have taken the first step in demonstrating a causal relationship.

Cause precedes effect. Time order means simply that we have to pin down which phenomenon, or variable, precedes the other in time. Just knowing that there is covariation between the policy act and gas prices says nothing about which factor came first. Whether we know the time order usually depends upon the evaluation design. In the natural gas example, which is particularly simple, the evaluation design was set up so that the first measurements were made immediately before passage of the act; it is clear, then, that any changes in gas prices must have come after the policy change and not before. In many but by no means in all evaluations, it is relatively easy to establish time order.

Nonspuriousness is usually the most difficult causal condition about which to be certain. Two factors may covary, not because one causes the other, but because some third factor is causing each of the first two factors to behave as they do. If covariation between two phenomena has been established, we must still be able to rule out the possibility that some third factor is at work. If we can

show that there is no third factor, then we say that the relationship between our first two factors is a nonspurious covariation.

The concept of nonspuriousness is probably easier to understand by example than in the abstract. Suppose someone argued that both the passage of the NGPA and the higher gas prices were caused by actions of a natural gas cartel and that the NGPA really had no bearing on prices. We can say that our observed covariation is nonspurious only if that argument and similar ones can be refuted. This final causal condition, which is usually the most difficult to establish, is attacked through a combination of the evaluation design and data analysis methods. In our example, the beforeand-after design does not allow us to rule out spurious variables, so we cannot claim that passage of NGPA caused an increase in gas prices.

Some Complications

Establishing causality is a tricky business. When the subject is a public program or policy, two factors complicate the task: the probabilistic relationship between cause and effect and the existence of multiple causes. The way these considerations affect how we reason about causality can be illustrated with an example.

If I throw a light switch in my house, a light goes on (assuming the switch, the circuitry, and the bulb are in working order). That is a simple causal relationship. But if the light sometimes goes on and sometimes doesn't, the relationship between the switch and the bulb is a probabilistic one. To be precise about the relationship, we could perform a number of trials and keep track of how often the light goes on. Suppose the light goes on 70 percent of the time. We would then say that the switch causes the bulb to light with a .7 probability. Or, for an experiment more like a program evaluation, I might throw each of the switches in my house and tabulate the number of times that a light goes on. From this information, we could make a probabilistic, causal statement about the population of switches in my house and their effects on my lights. Analogously, an uncertain connection between cause and effect almost always characterizes the relationship between public programs or policies and their intended effects.

Now, suppose my house lighting system is even more complicated. Suppose

not only that the kitchen light sometimes goes on when I throw the wall switch, but also sometimes it goes on when I start the furnace. Or when I open the kitchen faucet, the porch light sometimes goes on. Each light fixture may have multiple, probabilistic causes. And the situation is even more complicated, for when the outdoor temperature drops below 50°, the dining room light may go on. In addition to my own actions, uncontrollable events are now influencing my lighting system in a way that is predictable only in a probabilistic sense. Again, the analogy is clear: public outcomes, such as natural gas prices, are usually influenced by multiple causes, some controllable and some uncontrollable, and ordinarily we understand the cause-and-effect relationships only in a probabilistic sense.

Finding Causes

What, aside from rewiring his house, does an evaluator do when faced with such a situation involving multiple, probabilistic causes? The goal is to identify the causes, estimate their importance, and know the conditions under which they jointly produce observed effects. The tools for understanding the causeand-effect relationships are evaluation designs, measuring instruments, and data analysis methods. Of the three, the evaluation design is probably the most important in terms of affecting our confidence in causality statements. (GAO's Institute for Program Evaluation will be publishing a Methodology Transfer Paper on evaluation design in the near future.) For example, a true experimental design, with random assignment of treatment and comparison subjects, is usually regarded as the best way to identify and assess the strength of cause-and-effect relationships. However, because it can't often be used with public programs and policies, other designs are frequently employed.

Each design, when coupled with an appropriate data analysis method, gives an evaluator the means to address the causality conditions: covariation, time order, and nonspuriousness. It is important to realize that, in examining the evidence for the three conditions, we may sometimes become quite confident about our causal statements, but we can never prove causality.

What are the designs and data analysis methods that help us find causes? The table, which shows a number of approaches, is based on four broad design categories which are widely used in

evaluations: true experiments, quasiexperiments, sample surveys, and case studies. The confidence we can have in causal statements depends greatly upon the designs from which the statements are derived.

In a true experiment, the evaluator has direct control over the presumed causal variable, a great advantage in trying to demonstrate causality. Frequently used in certain fields, such as medicine and agriculture, the true experiment is often not feasible for evaluating social programs and policies. The associated data analysis methods include the analysis of variance, the analysis of covariance, and regression analysis.

Quasi-experimental designs come in many forms and are widely used in evaluation. Though the evaluator is not able to manipulate the putative cause, these designs can lead to causal statements strong enough for policy decisions. Common data analysis methods include analysis of covariance, regression analysis, ARIMA (auto-regressive integrated moving average), and log-linear models. When used to derive causal statements, the general aim of these procedures is to make statistical adjustments to compensate for the absence of control over causal variables.

Sample surveys have long been used to acquire descriptive information about a population. More recently, data analysis methods have been developed to probe survey information for causal relationships. As a class, sample survey designs and the associated analysis methods often lead to controversial causal statements because it is hard to rule out spurious variables. The procedures for analysis include the elaboration model (also called multivariate contingency analysis), path analysis, and LISREL (linear structural relations).

The cluster of ideas which constitute case study designs overlaps with similar approaches, such as participant observation and field research. Like sample surveys, these designs have traditionally provided very good descriptive information and are sometimes used to make causal inferences. The analysis methods, which are less structured than the statistical analyses used with other designs, go by names like analytic induction and negative case analysis. A common approach, oversimplified here, is to begin with a hypothesized causal statement and to look for cases which contradict the proposition. A negative case rules out the hypothesized cause and effect,

Analysis of Variance	
Analysis of Variance Analysis of Covariance Regression Analysis Log-Linear Models	
Analysis of Covariance Regression Analysis LISREL	
Log-Linear Models ARIMA MANOVA Regression Analysis	
Elaboration Model Path Analysis LISREL Log-Linear Models	

and the search goes on with a new causal statement. A hypothesized cause which survives the search for negative cases is a good prospect as a real cause.

It should not be assumed, from this brief review of design and analysis methods, that the choice of a strategy for examining causality is cut and dried. Most evaluations have resource constraints and multiple objectives, both of which will force trade-offs among strategies. Also, all strategies have their weaknesses, and this leads to the subject of triangulation.

Triangulation

No single approach to a question of causality is infallible. Nature seems to delight in obscuring causal relationships, so the evaluator is advised to employ diverse strategies for uncovering causes. Triangulation means applying several different design, measurement, and analysis approaches to each evaluation question. The strength of one strategy may offset the weakness of another so that, used in concert, multiple evaluation approaches lead to stronger causal statements.

Where To Look for More About Causality

Babbie, E.R. The Practice of Social Research, Second Edition. Wads-

worth, 1979. An introductory text with much discussion of causality, including a chapter on the elaboration model.

Bohrnstedt, G.W. and D. Knoke. Statistics for Social Data Analysis, F.E. Peacock, 1982. An introduction to statistical analysis with a stress on causal inference.

Cook, T.D. and D.T. Campbell. Quasi-Experimentation: Design and Analysis Issues for Field Settings. Rand McNally, 1979. A lengthy discussion of causality plus detailed treatments of designs and analysis methods that mostly fall within the quasi-experimental category.

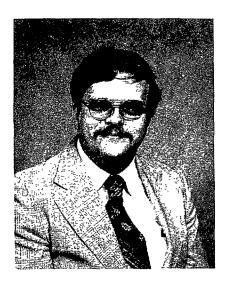
Denzin, N.K. The Research Act: A Theoretical Introduction to Sociological Methods, Second Edition. McGraw-Hill, 1978. A clear exposition of the more qualitative, case study approach to causality through the method of analytic induction. Also, a stress on triangulation.

Hirschi, T. and H.C. Selvin. Delinquency Research: An Appraisal of Analytic Methods. Free Press, 1967. Almost completely devoted to issues of causal analysis, this book is a good, nontechnical introduction to the subject. Examples come from delinquency research, but the principles are applicable to any topic.

See TOPICS p. 49

Charles S. Cotton

Charles S Cotton is a senior evaluator with the Energy and Minerals Division Since rejoining GAO in 1971 from military service, he has worked in two regional offices and three divisions Mr Cotton has a B S degree cum laude in accounting from the American University His awards include the 1980 William A. Jump Memorial Foundation Certificate of Recognition for noteworthy service in public administration.



Leonard W. Ellis

Mr Ellis is a GAO evaluator with the Energy and Minerals Division. He joined GAO in 1969 in the Civil Division and has served in several headquarters divisions before joining EMD in 1981. He has a B A degree in social sciences from Muhlenberg College in Pennsylvania.

Why All the Fuss Over Olympic Coins?

121156 025344

The chronology of events leading to the recent enactment of the Olympic Commemorative Coin Act illustrates how GAO can significantly aid the legislative process without issuing a report. We identified several important issues which we believed the Congress should consider and provided options for revising existing legislative proposals to resolve these issues. The Congress consequently passed a law that will help finance the 1984 Los Angeles Summer Olympic Games and U.S. amateur athletics. This law will save the Federal Government perhaps about \$360 million in indirect financing.

At first glance, the legislative proposal to mint coins to commemorate the 1984 Los Angeles Summer Olympic Games appeared innocuous. The Federal Government would merely mint coins, which would then be sold by a private marketer, with a portion of the net proceeds going to help finance the Games and U.S. amateur athletics.

The coinage program also appeared in keeping with the Los Angeles Olympic Organizing Committee's (LAOOC) intention that the 1984 Games be the first not to receive direct or indirect Government financing. The LAOOC trusts Americans will respond to the honor of holding the Olympic Games with an outpouring of patriotism and pride, fueled by the U.S. hockey team's triumph in the 1980 Olympic Winter Games and our boycott of the 1980 Summer Games in Moscow.

Another portion of the net proceeds from the coin sales would help the U.S. Olympic Committee (USOC) finance amateur athletics. The USOC shared the LAOOC's enthusiasm, noting that, for the first time in 52 years, the Summer Olympic Games will be held in the United States and that America's interest will be unparalleled.

The Congress shared these sentiments. On December 9, 1981, the Senate unanimously passed a bill to mint legal tender U.S. coins, and a companion bill in the House was introduced with 95 cosponsors, including the entire California delegation.

Into this arena of motherhood and apple pie ventured GAO. We believed a welldesigned coinage program could sup-

The chronology of events leading to port the 1984 Summer Olympic Games and U.S. amateur athletics; however, we thought the Congress should consider several key issues in evaluating proposals for such a program.

Indirect Federal Financing Had Not Been Considered

Our concern centered on three issues that would determine how much the Federal Government would indirectly finance the Games through a coinage program. According to our analysis of the proposed legislation and the LAOOC's agreement with a private marketing consortium, indirect Federal financing under the Senatepassed program could have exceeded \$360 million. Since proceeds to the Olympic committees would be less than \$175 million, the remaining \$185 million, in effect, would go to the private marketer for operating expenses and as profit. Although the marketing agreement was ultimately revised as to preclude such analysis, estimated proceeds to the Olympic committees could be less than the total indirect Federal financing.

Problems in Translation

We faced two problems: finding a receptive congressional ear and translating three esoteric issues into understandable language. The first proved relatively easy; the second seemed virtually impossible.

Congressional interest came from the Chairman of the House Subcommittee on Consumer Affairs and Coinage, who was waging a one-man crusade against private marketing of the coins. He was so receptive to our findings that we were the sole witnesses at an April 6, 1982 hearing, which lasted over 3 hours.

Our prepared statement addressed the extent to which the Federal Government would

- bear the risk of declining gold and silver market prices and other costs associated with redeeming these coins at face value.
- incur uneconomical manufacturing costs, thereby foregoing revenues histori-

cally derived from minting coins, and
• forego future tax revenues if the coins are marketed as tax-deductible contributions.

We soon learned that not all our remarks were transparent. Such comments as "substituting gold and silver for copper and nickel in the Olympic coins, thereby reducing seigniorage, constitutes foregone revenues in the form of uneconomical manufacturing costs" and "the Federal Government has always subsidized amateur athletics in the form of foregone tax revenues" needed translation. Undaunted, we measured three legislative proposals against the above three issues

The Federal Government would have foregone seigniorage revenues of about \$260 million under the Senate bill. (Seigniorage is the difference between a coin's face value and the value of its metal content.) In addition, foregone Federal tax revenues could have exceeded \$100 million.

We concluded that the Federal Government could retain seigniorage revenues only by recovering the value of the coins' bullion content plus their face value in the selling price. This solution also eliminates the Government's risk should gold and silver market prices fall, since both the benefit of appreciation as well as the risk of depreciation in the value of the coins' bullion content would be the owner's. Similarly, any enabling legislation could make it clear that the coins may not be marketed to imply that they are tax-deductible.

We then analyzed another version of the Senate bill, introduced a week before the hearing by the Chairman of the House Committee on Banking, Finance and Urban Affairs, and a bill by the chairman of the committee's coinage subcommittee, introduced just the day before the hearing. Although the committee chairman's bill addressed some of these issues, the Government would forego about \$210 million in seigniorage revenues and also would risk a drop in gold and silver market prices. Conversely, the subcommittee chairman's bill favorably resolved every issue we had raised.

Both chairmen's offices had sought our assistance in drafting their bills. And since both were at the hearing along with the original sponsor of the Senate-passed bill, the rhetoric proved lively and probing. Although we sometimes felt like a pinball bouncing off three congressional cushions, we trusted the House would consider the issues we raised in evaluating various coinage program proposals.

ARTIST'S RENDITIONS OF OLYMPIC COIN DESIGNS

Coin Designs Illustrated Larger Than Actual Size
Actual Coin Specifications are Contained in Brochure

1984 Silver Dollar Coin





OBVERSE

REVERSE

ARTIST'S RENDITIONS OF OLYMPIC COIN DESIGNS

Coin Designs Illustrated Larger Than Actual Size Actual Coin Specifications are Contained in Brochure

1984 Gold Ten Dollar Coin







REVERSE

Even Sports Illustrated Put On the Heat

The following weeks embroiled us in an emotional controversy over who should market the coins: the U.S. Treasury or a private marketer. The 100-meter dash to have our issues considered before legislation was enacted turned into a decathlon requiring stamina and perseverance. During that period, we wrote three letters responding to congressional requests concerning the issues raised in our testimony; attended several subcommit-

tee hearings, including one in which we were called from the audience to respond to a statement by the Treasurer of the United States; and had numerous contacts with various congressional offices.

Meanwhile, pressure began to mount for House action. The private consortium which had agreed with the LAOOC to market the coins, guaranteeing the LAOOC and the USOC \$30 million, was threatening to withdraw, taking with it \$4 million of the \$5 million already provided

See COINS, p. 49



Margaret M. Armen

Margaret M Armen, an attorney-advisor in GAO's Office of General Counsel, joined the agency in 1978 after receiving her J D degree from Cleveland State University Prior to law school, Ms Armen worked for 5 years in the personnel administration area She served as vice-chair of GAO's Women's Advisory Committee in 1980-81 and received GAO's Squal Employment Opportunity Award in 1981. She is a member of the Ohio and District of Columbia Bars.

Because GAO is primarily an audit agency, most of the articles we publish in the GAO Review deal with evaluation and related topics. In this issue, we are presenting an article with a slightly different orientation: law. We would like to encourage more articles of this type from GAO's legal staff.

Equal Pay—Fair Play

Women earn 59 cents of every dollar earned by men, according to the Department of Labor, which last published these data in 1979. The phenomenon of the "earnings gap" between men and women has persisted—and has even widened somewhat—in the nearly 20 years of enforcing Federal equal pay and antidiscrimination laws. Recently the concept of "equal pay for work of comparable worth" has been talked about as a way of narrowing, or even closing, the earnings gap.

To appreciate how the comparable worth argument might help accomplish this, we should first look at why the 1963 Equal Pay Act² and the Civil Rights Act of 1964³ have not stopped wage and sex discrimination. This article will explore the shortcomings of these two laws with respect to fair pay for women workers, a recent Supreme Court decision in the *Gunther* case that has positive implications for the future, and the comparable worth theory. They help explain the sexbased salary discrepancies in the United States and how we can fix these discrepancies in the future.

Before the Equal Pay Act

The idea of equal pay for working women really began with World War II. Before then, few women worked outside the home, and the wages for those who did were traditionally so low that most men did not actively seek "women's work." Employers who hired men and women to perform the same jobs commonly set two pay scales, one for men and a lower one for the women. Then, during the war, women filled the factory and defense jobs left behind by men who had joined the armed forces. As a matter of national policy in the era of "Rosie the Riveter," it was unthinkable that the women working in the national defense effort should be shortchanged for their labor, so Congress created the War Labor Board. The Board inspected plants and made sure that women workers were given fair pay for work comparable to that of men. The board was much resented by employers and labor organizations. It was disbanded soon after the war, but the bad taste left in the public mouth inhibited the passage of equal pay legislation for nearly 20 years.4

At every session of Congress between 1945 and 1962, one or more equal pay bills were introduced. They all failed. In 1963, Representative Charles Goodell first suggested a compromise on the nettlesome matter of enforcement.⁵ Equal pay legislation would be proposed as an amendment to the Fair Labor Standards Act, where it would be administered by the Wage and Hour Division of the Department of Labor.⁶ The ability to achieve equal pay without creating a new enforcement bureaucracy was just the push needed for passage.⁷

Earlier, considerable debate had taken place over whether the equal pay standard to be established should be applied to "equal" or "comparable" work. 8 Rep-

1"The Earnings Gap Between Women and Men," 1979, U.S. Dept of Labor, Office of the Secretary, Women's Bureau. These statistics are no longer published by the Labor Department

²29 U S.C. § 206(d) (1976)

³42 U S C § 2000e, et seq. (1976). The act generally outlawed discrimination in all governmental and commercial activities. Title VII of the act banned discrimination in the terms, conditions, and privileges of employment based on race, color, religion, national origin, and sex. This part of the law is referred to throughout this article as "title VII."

⁴H R Rep No 88-309, 88th Cong, 1st Sess., Supplemental Views of Rep. Frelinghuysen, et al

5109 Cong Rec 9197 (remarks of Rep Goodell)

⁶Enforcement remained with the Wage and Hour Division until July 1, 1979, when it was transferred to the Equal Employment Opportunity Commission. Reorganization Plan No. 1 of 1978, 43 F. Reg. 19807

⁷There were drawbacks to this approach, however. Most notable was the limited coverage of the Fair Labor Standards Act 109 Cong Rec 9193 (remarks of Rep Bolton) and 9202 (remarks of Rep. Kelly) Since 1963, the act's coverage has been greatly expanded

⁸See 108 Cong Rec 14767-71, passim

16

resentative Katherine St. George9 objected to the demeaning implications of the word "comparable" and offered an amendment to make the standard "equal" work. More than half of those who addressed the issue in Congress argued that "equal work" was too restrictive a standard and that its adoption would handicap the effort to achieve economic equality for women workers. However, many congressmen still feared an intrusive enforcement bureaucracy, so they quickly supported the proposal for "equal work" because it allowed virtually no judgment to be exercised in enforcement. and it also permitted employers to continue to set such wage rates as they found to be necessary and economical. The more restrictive version was accepted, and the Equal Pay Act of 1963 reads as follows:

No employer having employees subject to [the Fair Labor Standards Act] shall discriminate, within any establishment in which such employees are employed, between employees on the basis of sex by paying wages to employees in such establishment at a rate less than the rate at which he pays wages to employees of the opposite sex in such establishment for equal work on jobs the performance of which requires equal skill, effort, and responsibility, and which are performed under similar working conditions, except where such payment is made pursuant to (i) a seniority system; (ii) a merit system; (iii) a system which measures earnings by quantity or quality of production; or (iv) a differential based on any other factor other than sex: Provided, That an employer who is paying a wage rate differential in violation of this subsection shall not, in order to comply with the provisions of this subsection, reduce the wage rate of any employee.1

What's Wrong With Equal Pay for Equal Work?

The main drawback to the existing Equal Pay legislation is just what was debated on the House floor: the "equal work" language creates too narrow a standard. "Equal work" is a term defined in the law as jobs requiring equal skill, effort, and responsibility, performed under similar working conditions; therefore, what constitutes equal work has not been subject to the courts' or the public's commonsense interpretation in a spirit of fair play.

To illustrate the "equal work" principle in practice, consider the following. Three different factory workers each carry 20 pounds of supplies the same distance. One carries two 10-pound buckets, another carries a 10-pound bucket and a 10-pound tool box, the third carries a 20-pound tool box. An employer might well take the position that the employees are not performing equal work, because different skill and effort is involved in carrying two 10-pound weights than one 20-pound weight. Assume also that the employees have equal training and seniority and that each makes the same number of trips per day with the tools and buckets. Now assume that the employee carrying the 20-pound tool box is a woman and the other two are men. The woman could legally be paid less if she is performing different-that is, not "equal"work.

The above story is not far-fetched; the first major Equal Pay Act case involved similar arguments. 12 Wheaton Glass Co., the employer, argued that its male "selector packers" working on the same product line and performing the same duties as female "selector packers" were justifiably paid more for selector packer work because the men were also available for unskilled, lower paid utility work in the packing room. All the men were paid approximately \$15 a week more than any of the women whether they actually did any utility work or not. The company agreed that only a few men actually performed any utility work, and those that did spent less than 20 percent of their time at it, but the company argued that the flexibility of male selector packers made their jobs worth more. 13 This wage differential was legal, the company contended, because the possibility of being assigned to do utility work in the packing room made the men's and women's jobs unequal.

Wheaton won its case at the District Court level on the theory that men and women were not performing equal work.14 On appeal, the 3d Circuit reversed. That opinion indicated that minor differences in work duties did not make very similar jobs unequal. The case was eventually presented to the Supreme Court, which allowed the 3d Circuit's decision to stand. Since the Supreme Court did not enunciate its own standard, no fully reliable guideline has ever been developed on which to determine whether similar work is in fact "equal work." 15 The outcome for Wheaton Glass was that it took the Department of Labor 7 years of litigation

to win equal pay for female selector packers. 16

The inevitable result of this fuzzy state of the law is that, until challenged, employers continue their existing wage practices, whether "equal" or not. When challenged, the narrow standards and their uncertain interpretation encourage the defending employer to litigate rather than conciliate. Why do employers spend the time and money defending an equal pay action? First, the chances of winning are

^{9&}quot;I have thought right along I have guessed what the word 'comparable' [means] In reality, by using that word, you are not giving full equality * * * You are going back to the good old adage that women are so weak and delicate that they need protection " 108 Cong Rec 14768 (remarks of Rep St George).

¹⁰¹⁰⁹ Cong Rec 9197-98

¹¹29 U S C §206(d) (1976) The act allows unequal pay for equal work only if based on a seniority, merit, or piecework system or when the pay differential is not based on sex These are the exceptions to the Equal Pay Act discussed in the text at footnote 27 below

¹²Wirtz v Wheaton Glass Co , 284 F Supp 23 (D N J 1968), rev'd sub nom , Schultz v Wheaton Glass Co , 421 F 2d 259 (3d Cir 1970), cert denied, 398 U S 905 (1970)

¹³Prior to 1969, most States had protective laws restricting duties and working hours of female employees. Applying these restrictions, female selector packers were not legally permitted to perform some of the utility work. Protective laws remain on the books in many States, but they are no longer enforced.

¹⁴The District Court found 16 separate functions in the utility jobs and identified all of them as distinctions between men's and women's work in the position of selector packer

¹⁵Compare, for example, Brennan v City Stores, Inc., 479 F 2d 235, 238 (5th Cir 1973) (more than comparability but less than complete identity required to meet equal work test) with Wheaton Glass "substantial equality" test

¹⁶The fact that the employer was able to postpone raising female employees' wages for 7 years represented a savings which partially balanced the costs of litigation Additionally, back-pay claims under the Fair Labor Standards Act are more limited than under title VII

very good;¹⁷ second, to cure an Equal Pay Act violation, the employer must raise the wages of the lower paid employees.¹⁸ Depending on the industry, the relative numbers of male and female workers, and the amount of the previous pay differential, quite a lot of money can be at stake.

Effect of Title VII of the Civil Rights Act of 1964

One year after passing the Equal Pay Act, the Congress totally outlawed employment discrimination based on race, color, religion, national origin, and sex. ¹⁹ Today, employers can neither refuse to hire an applicant on the basis of prohibited factors, nor can they set wage rates based on them. With respect to women's wages, however, the Congress allowed a loophole in title VII's broad protection. An amendment, named for its author, Senator Bennett, stated that the Equal Pay Act would continue despite the allencompassing language of title VII. ²⁰ The Bennett amendment reads as follows:

It shall not be an unlawful employment practice under [title VII] for any employer to differentiate upon the basis of sex in wages of compensation paid or to be paid to employees of such employer if such differentiation is authorized by the provisions of [the Equal Pay Act].²¹

For many years this amendment was thought to incorporate the entire Equal Pay Act into title VII,22 meaning that wage differentials between men and women were legal as long as the two sexes were not performing "equal work." Given the vicissitudes of the "equal work" standard discussed above, such an interpretation severely hampered progress toward economic equality for women, despite all the other gains achieved under title VII. In 1981, the Supreme Court arrived at a different interpretation of the Bennett amendment, which may open the door to implementing comparable worth or other theories aimed at equalizing earnings.

Gunther—The Facts, The Law, and The Future

In County of Washington v. Gunther, ²³ male prison guards at the county jail were assigned to male prisoners while female

prisoners were supervised by female guards. Female guards were responsible for fewer prisoners and also performed some clerical duties and, therefore, were not performing equal work.24 The County's own job evaluation of male and female guard positions and its local wage survey showed that the female guards' services were "worth" approximately 95 percent of the male guards' services. The County, however, ignored its own study and set women's starting wages at 74 percent of the starting pay for men. It also adjusted the pay scale so that the highest paid woman received 10 percent less than the lowest paid man.

The women argued that because the County's own survey indicated a higher value for the female guards' positions, some of the pay differential must have been attributable to intentional sex discrimination. ²⁵ The District Court, however, refused to accept any evidence of sex discrimination once the County demonstrated that the men and women were not performing equal work. The District Court held that the Bennett amendment precluded any sex-based wage discrimination claim under title VII, unless the claim also showed a violation of the Equal Pay Act. ²⁶

The Supreme Court examined the legislative history of the Bennett amendment and concluded that it did not incorporate the entire Equal Pay Act into title VII. Its function, the Court said, was only to resolve conflicts between these two pieces of legislation by continuing the four exceptions in the Equal Pay Act.27 The logical conclusion to draw from this is that general title VII principles will now apply to employers' wage-setting practices and to wage administration.2 opinion did not expand on how title VII might be applied in sex-based wage discrimination cases, but it did set the stage for future discussions of factors to be weighed in determining wages.

- ¹⁸See text at footnote 11 and footnote 15, above.
- 19Title VII of the Civil Rights Act of 1964, 42 U.S.C. § 2000e et seq.
- ²⁰The Senator noted the "many years of yearning by the members of the fair sex" which preceded the enactment of the Equal Pay Act and expressed his fear that the "wholesale insertion of the word 'sex' in [title VII]" might cause conflicts "The purpose of [the] amendment is to provide that in the event of conflicts, the provisions of the Equal Pay Act shall not be nullified" 110 Cong. Rec. 13647
- ²¹The amendment is codified at 42 U S C § 2000e-2(h) (1976)
- ²²See, for example, Davis v Western Electric Co, 24 FEP Cases 65 (M D N C 1979), Laffey v Northwest Airlines, 567 F 2d 469 (D C Cir 1976), cert denied, 434 U S 1086 (1978)
- ²³452 U.S. 161 (1981) *Gunther* was a 5-4 decision, and Justice Brennan wrote the majority opinion
- ²⁴Oregon law required that female prisoners be under the supervision of female guards, so the employment of females and the character of their duties were, to an extent ,predetermined 452 U.S. 161, 164 at note 2
- ²⁵Plaintiffs' claim that sex discrimination played some role in the County's wagesetting decisions was accorded some presumptive validity when the County terminated all the female guards after they filed their court action. The charges of retaliation were also under court examination in a separate case. 623 F.2d. 1303. (9th. Cir. 1979).
- ²⁶20 FEP Cases 789 (D Ore 1976)
- ²⁷In so doing, it relied on the comments of Senator Bennett, quoted in note 20, above, and on the Senator's representation (with the concurrence of Senators Humphrey and Dirksen) that his was only a "technical amendment"
- ²⁸After Gunther, a plaintiff may allege sex discrimination in wages without alleging or proving that the Equal Pay Act was also violated. The logic of this position was also seen in I U E v. Westinghouse, where the court noted that continued exclusive enforcement of the Equal Pay Act would tolerate an employer's unfavorable treatment of women in a way that would be illegal discrimination if the same practices were applied to other protected groups 631 F. 2d. 1094, 1100 (3d. Cir. 1980), cert denied, 452 U.S. 967 (1981)

18

¹⁷For example, the cases on whether nurse's aides and hospital orderlies perform equal work split about 50-50 Compare Hodgson v Golden Isles Nursing Homes, Inc. 468 F. 2d. 1256, 1258, (5th Cir. 1972) (no substantial identity of job functions) and Hodgson v Brookhaven General Hospital, 1470 F. 2d. 729 (5th Cir. 1972) (substantially equal effort expended by aides and orderlies on different tasks was "equal work"). These cases were decided by the same court in the same year on similar facts.

Perhaps the cardinal rule of Federal antidiscrimination law is that employees may not be treated differently on the basis of race, color, religion, national origin, and sex. 29 Title VII not only outlaws intentional discrimination, but also it prohibits unintentional discrimination that may result from applying an apparently neutral rule with an adverse impact on a protected group. 30 Applying this principle to Gunther, if men's wages were based on the Washington County study, women's wages should have been based on it as well. Another possibility is that an employer might be barred from using labor market rates as a basis for setting wages if the reference to market rates perpetuated artificially low wages for women. The latter is one of the principal tenets of the comparable worth theory.

Comparable Worth

Simply stated, a theory of comparable worth argues that job functions and their value to the employer ought to determine compensation without any consideration of the gender of the job seeker or job holder.31 Proponents of comparable worth base their support of the theory on two facts: (1) that, contrary to the assumption underlying the Equal Pay Act, it is possible to evaluate fairly the knowledge. skill, and effort required to perform various jobs and to compare diverse jobs on the basis of these factors; and (2) that society has historically undervalued women's labor, and this fact continues to have a depressing effect on women's

A rare and interesting equal pay case offers some insight into how the job evaluation process might work. In Thompson v. Boyle, 32 women employees in the bindery at the Government Printing Office filed an equal pay action contesting a \$3 to \$4 per hour pay differential. The court found that GPO set its job standards for bindery work unrealistically high and that it did not make training on bindery equipment available for women GPO employees. These facts coupled with historic discrimination against women in the printing industry generally, kept women employees from operating any of the heavy equipment on the bindery floor, even though women did operate heavyduty sewing machines in the gallery above. One particular type of sewing machine operated by some of the women was of industrial capacity, but the bindery jobs held by men paid more than the women's industrial sewing jobs.33

The judge in the case was called on to determine whether operating the industrial sewing machines merited the same pay as 20 or more different men's jobs on the bindery floor. The judge analyzed the gross motor skills needed to operate all the assorted machines.34 He also looked at the need to lift and manipulate heavy volumes in the stitching and binding processes. He compared the levels of concentration and precision involved in performing the various jobs. He evaluated the training time needed to operate the several machines competently. After comparing all the different elements of the men's bindery jobs and the women's industrial sewing jobs, the judge determined that operating the industrial sewing machines warranted the same pay as the jobs on the bindery floor. 35 Reading the opinion, one gets the impression that nearly every job that has been historically sex-segregated could be successfully compared and evaluated by breaking it down into its component elements and fitting the job into the overall employment scheme of a particular employer.

The second point buttressing comparable worth arguments is the historic undervaluation of women's labor. On this point, the late anthropologist, Margaret Mead, observed that

[o]ne aspect of the social valuation of different types of labor is the differential prestige of men's activities and women's activities. Whatever men do—even if it is dressing dolls for religious ceremonies—is more prestigious than what women do and is treated as a higher achievement.³⁶

This phenomenon crosses cultural lines, as may be seen in the Soviet Union. where more than 75 percent of doctors are women. There, the medical profession is held in low esteem, and wages are so low that the government has had difficulty in getting men to enroll in medical school.37 This is in sharp contrast to the United States, where medicine, until recently an almost exclusively male preserve, is one of the most prestigious and well-paid professions. Historical examples of underpaid women's work in our culture might be the frontier schoolmarm or the seamstresses in turn-of-thecentury sweatshops. Contemporary examples might be nurses, retail clerks,

Job evaluation, discussed above, has traditionally been used when an employer sought to rationalize existing employment patterns and related compensation systems. This alone has often meant the perpetuation of lower status and pay for women, but pay-setting decisions are often based on a job evaluation plus a survey of prevailing community wage rates for similar jobs. Market rates reflect the endemic sex-based wage discrimination that began before Rosie the Riveter's time and continued despite the Equal Pay Act and the Civil Rights Act. When market rates are used to determine wages in jobs held predominantly by women, the result is the continuation of historic undervaluation of women's work.

Labor Market Rates and Women's Work

One example of the negative effect of labor market rates on women is found in Christensen v. Iowa. 38 This was the first

²⁹See, for example, *McDonnell Douglas Corp.* v *Green*, 411 U.S. 792 (1973).

³⁰See, for example, *Griggs* v *Duke Power* Co , 401 U S 424, 431 (1971)

³¹ If an occupation has been historically sexsegregated, either because of past discrimination or because women have disproportionately affiliated to it, an assessment of comparable worth would require an employer to upgrade the wages of the female occupation by comparing it to unrelated jobs requiring similar levels of training, skill, and effort, and producing equally valuable results, but which were occupied mostly by men

³²⁴⁹⁹ F Supp. 1147 (D D.C 1979)

³³Men earned \$11 16 per hour, while 36 women operating industrial type machines earned \$7.59 per hour, and 5 group leaders earned \$8 01 per hour.

³⁴Extensive testimony of job evaluation experts provided information on the component operations of working on each of the machines examined by the court.

³⁵ Several hundred lower graded female employees who operated the less demanding sewing machines did not receive monetary relief from the court

³⁶Mead, Margaret, "Prehistory and the Women," Barnard College Bulletin, April 30, 1969 Supp, p. 7.

³⁷Dodge, Norton, "Women in the Professions," Women in Russia, Dorothy Atkinson, et al. eds., Stanford University Press, 1977.

³⁸⁵⁶³ F.2d 353 (8th Cir 1977).

case to present a legal argument for comparable worth. The plaintiff was a female employed as a clerk by the University of Northern Iowa. The University had divided its employees into several different wage categories on the basis of job responsibility, training, and the value of the service to the university. To accomplish this, the university used a system of points and factors known as the "Haves Sys.em." Based on this system, physical plant workers were placed in the same labor grade/salary range as clerical workers. The plant workers (mail carriers and parking enforcement officers, among others) were predominantly men. The clerical workers (secretaries and keypunch operators, among others) were all women. Local labor market statistics showed that the prevailing wages in the community for jobs similar to the university plant workers were higher than the prevailing wages for traditionally female jobs like secretaries and data-entry technicians. The university adjusted the starting salaries of plant workers to the middle of the established wage range but continued to pay beginning clerical workers at the bottom of the range. The plaintiff alleged a violation of title VII on the grounds that, (a) by superimposing labor market rates on its established job evaluation system, the university carried forward a traditional economic bias in favor of men, and (b) the requisite skills for the various jobs did not warrant such a differential because the university had stated that the jobs were "worth" the same.

Because this case was decided several years before the Supreme Court's opinion in *Gunther*, which permitted title VII rules to cover sex-based wage discrimination claims, it is surprising that the Circuit Court cast its opinion in a title VII analysis. The prevailing judicial view of the Bennett amendment at the time would have concluded simply that plant and clerical workers were not performing equal work. Judge Bright wrote:

The value of the job to the employer represents but one factor affecting wages. * * * We find nothing * * * in Title VII suggesting that Congress intended to abrogate the laws of supply and demand or other economic principles that determine wage rates for various kinds of work. 39

There is a contrary but equally supportable analysis of title VII on these facts. Although using community wage rates to set wages for jobs the employer

objectively determines to be of equal value is a neutral practice on its face, it disproportionately burdens women. Therefore, it violates title VII unless justified by business necessity. ⁴⁰ In his concurring opinion in *Christensen*, Judge Miller indicated a willingness to apply such a title VII disparate impact analysis but for the necessity, in his view, of applying the Bennett amendment and the equal work standard. ⁴¹

Another early case clearly demonstrates the harsh economic consequences of using past wage trends to determine present and future pay. The plaintiff, Mary Lemons, was a nurse in a Denver County hospital. Denver set its salaries for nurses by comparing wages at county hospitals to nursing salaries at private hospitals. Salaries for other city jobs were determined by comparing local labor market rates for a wide variety of positions. The result was that Denver paid starting tree trimmers and outdoor painters more than some experienced graduate nurses.42 Comparable worth advocates argue that, given the different levels of training, skill, and responsibilities involved in nursing and tree trimming, a system that could tolerate such wage discrepancies, let alone endorse them as nondiscriminatory, must be fatally flawed.

The flaw is, of course, that existing wages in female-dominated occupations are depressed because of traditional biases and the lingering effects of past discrimination. The *Lemons* court realized this and assessed the situation this way:

[t]he relationship of pay for nurses to pay for other positions is obviously a product of past attitudes, practices, and perhaps of supply and demand.⁴³

The Lemons court did not see this as a legally objectionable situation, however. What it seemed to say was that this state of affairs was lamentable but not subject to judicial scrutiny. The Supreme Court's Gunther decision has allowed some judicial intervention, however, and the next incarnation of the Lemons case may have sweeter results.

Conclusions and Possibilities

The Supreme Court has stated that title VII principles may form the basis for a claim of sex discrimination in compensation. If the practice of using labor market rates to set wages was to be prohibited under title VII, this would go a long way toward easing the effect of past wage

discrimination and achieving economic equality for working women, the ultimate goal of comparable worth. Further judicial application of the *Gunther* case will surely come in the next year or so, and it is likely to take this form.

Whether any court might also venture a decision that affirmatively requires (or de facto necessitates) employer job evaluations is more speculative. Instituting such a requirement seems more properly the role of Congress or perhaps of the Equal Employment Opportunity Commission. 44 An appropriate first step would probably be for the Commission to issue guidelines on job evaluation factors, but this does not seem likely to happen any time soon. Meanwhile, if employers are using job evaluation systems, they should be wary of disregarding or ignoring the results of their own studies, as Gunther amply demonstrates.

Some employers resisted complying with the equal pay initiatives of the early 1960's, Also, there is no reason to assume an instantaneous, universal acceptance of a comparable worth theory, even if it has congressional and/or judicial blessings. A recent estimate of the cost to employers of instituting comparable worth runs to \$11 billion a year. Perhaps \$11 billion is more than anyone is willing to spend to satisfy the sense of unfairness that the Lemons case evokes. That question remains for others to decide. If, however, \$11 billion in additional wages is ultimately disbursed to working women and their families in weekly pay checks, that fact would have a significant effect on the role of women in society and on women's place in the work force.

³⁹ Id. at 356

⁴⁰This analysis would correspond to the law in Griggs v. Duke Power Co., 401 U.S. 424 (1971) This kind of analysis is referred to as "disparate impact" It was discussed earlier in the text at footnotes 29-30

⁴¹563 F.2d 353, 357 (8th Cir. 1977)

⁴²Lemons v City and County of Denver, 620 F 2d 228 (10th Cir. 1980)

⁴³Id. at 229. Both Lemons and Christensen mentioned "supply and demand" as market issues bearing on salaries. The case of nurses, a critical skilled occupation in chronic undersupply, belies the argument that the unrestricted operation of "free market" factors necessarily results in rising wages.

⁴⁴The Commission scheduled hearings on the comparable worth issue in January 1980 and issued a report in September 1981 but has taken no further action



Clark G. Adams

Clark G. Adams is a group director with the Procurement, Logistics and Readiness Division Prior to joining GAO, he served 10 years on the staff of the Cost Accounting Standards Board Earlier, Mr Adams worked with the Rockwell International Corporation where he directed the contracts and pricing activities for the corporation's Los Angeles division Mr Adams received his BS in Law and J.D. degrees from the University of Utah Mr Adams is a visiting lecturer at the Defense Systems Management College at Fort Belvoir, Va and the Army Logistics Management Center at Ft Lee. Va He lectures frequently at seminars and symposia for the National Contract Management Association, the Federal Bar Association, the American Bar Association, and the Association of Government Auditors



Ralph C. Dawn

Ralph C Dawn is an evaluator with the Procurement, Logistics and Readiness Division He received his B S degree in political science from the University of Maryland and his M P A degree from the American University Mr Dawn is a member of the American Society for Public Administration and has received Certificates of Appreciation and Ment from GAO divisions

The Future of Cost Accounting Standards

The Cost Accounting Standards Board enjoys a unique status among U.S. Government agencies. It's one that actually went out of business. Very few other agencies can make that claim.

This signal event occurred on September 30, 1980. The Board's demise was quite unexpected and left the defense procurement community in a quandary. Although the Board no longer exists, its promulgations still have the full force and effect of law and must be observed in both existing and future negotiated national defense contracts. Without the board, there is no authority to interpret the standards, to provide waivers and exemptions, and to implement the board's promulgations. Therefore, much attention has been focused on what the future may hold for the Cost Accounting Standards Board, its promulgations, and those contractors subject to its rules and regulations.

To understand the future of Cost Accounting Standards (CAS), one must understand some things about the past. In 1970, GAO reported that the cost accounting practices followed by defense contractors provided profits to contractors in the guise of costs and promoted contract terms that were less than favor-

able to the Government. Further, prior to the Cost Accounting Standards, contract costing procedures did not allow comparisons between differing bidders or even different contracts with the same contractor. To improve the Government's evaluation of a contractor's accounting practices, uniform cost accounting practices were needed. An evaluation of a contractor's accounting practices without the guidance of uniform cost standards placed an extreme burden on procurement officials.

Cost Accounting Standards Board

Public Law 91 – 379 authorized establishing the board in August 1970 as a legislative agency. Former Comptroller General, Staats, as Board chairman, appointed four members to serve with him. The members were prominent figures from government, public accounting, academia, and the defense industry.

From 1970 to 1980, the Board promulgated 19 standards covering virtually all aspects of contract costing, shown in the table.

Cost Accounting Standards

- 401 Consistency in Estimating, Accumulating and Reporting Costs
- 402 Consistency in Allocating Costs Incurred for the Same Purpose
- 403 Allocation of Home Office Expenses to Segments
- 404 Capitalization of Tangible Assets
- 405 Accounting for Unallowable Costs
- 406 Cost Accounting Period
- 407 Use of Standard Costs for Direct Material and Direct Labor
- 408 Accounting for Costs of Compensated Personal Absence
- 409 Depreciation of Tangible Capital Assets
- 410 Allocation of Business Unit General and Administrative Expenses to Final Cost Objectives
- 411 Accounting for Acquisition Costs of Material
- 412 Composition and Measurement of Pension Cost
- 413 Adjustment and Allocation of Pension Cost
- 414 Cost of Money as an Element of the Cost of Facilities Capital
- 415 Accounting for the Cost of Deferred Compensation
- 416 Accounting for Insurance Costs
- 417 Cost of Money as an Element of the Cost of Capital Assets Under Construction
- 418 Allocation of Direct and Indirect Costs
- 419 (Withdrawn)
- 420 Accounting for Independent Research and Development Costs and Bid and Proposal Costs

Cost Allocation and Measurement

The Board's promulgations improved the allocation and measurement of contract costs because the standards "minimized the risks which accompany reliance on cost as a basis for pricing, instead of market forces to establish contract prices." By narrowing the available cost accounting options and by providing for disclosure of cost accounting practices, the Board's promulgations increased the certainty as to how various costs will be treated during the life of a contract. Further, uniformity and consistency in cost accounting practices improved the Government's ability to

- evaluate proposals from competing suppliers,
- obtain fair agreement on contract prices, and
- review contractor cost reports.

Final Report to Congress

Although the Board's final annual report to Congress stated that it had substantially completed its assigned task of promulgating cost accounting standards, the report included some observations for continuing some of the work which was done by the Board. For example, the final annual report stated that there is a continuing need to

- evaluate the effectiveness of the standards, rules, and regulations,
- provide prompt consideration under which procurement agencies request waivers from the standards.
- issue interpretations of the standards, and
- recognize situations which suggest possible amendments or new standards.

Need for Continuation of the Board

Recent developments necessitate creating a new CAS-type organization:

- DOD's Procurement Initiative to amend or repeal CAS 409, "Depreciation of Tangible Capital Assets,"
- NASA's processing of a waiver to the Board's promulgations,
- unrealistically low interest rates charged to contractors for noncompliance with CAS, and
- effect of the Accelerated Cost Recovery System upon CAS 409.

Amend or Repeal CAS 409

Recently, representatives of the defense industry and the Department of Defense (DOD) have recommended repealing or amending the depreciation standard, CAS 409. The DOD Procurement Initiative recommends that, to encourage capital asset investment and to increase productivity in the defense industry, CAS 409 should be repealed or amended to permit more rapid capital equipment depreciation for contract costing purposes, and further, to recognize replacement depreciation accounting.

Prior to promulgating this standard, research by the Board into fixed asset accounting practices found a range of depreciation methods available for contract costing, without adequate criteria for the choices made. Also the Board's research indicated that defense contractors relied upon the Department of Treasury and Internal Revenue Service quidelines for determining estimated periods of useful service lives. The Board found that these guidelines were based upon depreciation lives shorter than the actual asset utilization periods for many individual contractors. The Board concluded that the asset lives and depreciation methods selected by contractors under existing regulations resulted in unduly accelerated allocation of depreciation costs.

The standard was promulgated to

- provide criteria with respect to depreciation expense being identified with negotiated defense contracts,
- assign cost of tangible capital assets to cost accounting periods, and
- allocate such costs to final cost objectives in an objective and consistent manner.

To repeal or amend CAS 409 without considering all related factors, such as CAS 414, CAS 417, and DOD's Profit Policy, could dramatically increase the size of DOD's budget. This Procurement Initiative fails to address the effect of destroying uniformity in the cost accounting practices followed by Defense contractors. Further, this initiative fails to require that if defense contractors are to receive increased benefits from their current investment in plant and equipment, then the additional cash flow should at least be earmarked for future capital asset acquisitions.

Waiver Authority

Another recent development, which illustrates the need for a CAS maintenance function, is NASA's granting a waiver to the standards. The Board recognized that urgent situations might call for an immediate waiver from all or a portion of the requirements of the Cost Accounting Standards. The Board designed the regulations so as to retain sole authority to grant waivers. Although NASA processed a waiver to CAS, the method of addressing this legal question has been ongoing since 1980. A mechanism is needed to grant essential waivers more promptly.

Low Interest Rate

Another issue that warrants the attention of a CAS-type maintenance function is the regulation penalizing a contractor for failure to comply with an applicable standard. If such failure results in increased costs paid by the United States, the law requires the Government to recover these increased costs plus interest of seven percent per annum. This unrealistically low interest rate may not discourage noncompliance with the standards.

Effect of ACRS Upon CAS 409

To officially change or to interpret the effect of the newly enacted Accelerated Cost Recovery System (ACRS) upon CAS 409 are more reasons to establish an organization like the CAS Board. This standard requires that, for contract costing, the contractor's depreciation method should be acceptable for Federal income tax purposes and reasonably reflect the expected consumption of services. Since ACRS does not reflect expected consumption of services but is, for tax purposes, the only recovery method acceptable for assets put in service after 1980, there is an inconsistency with this standard that should be formally addressed by a CAS Board or similar group.

Even if GAO or some other agency suggested modifications to the standards, rules, and regulations, a Board no longer exists to address these inconsistencies.

¹Cumulative Progress Report To The Congress 1971-1980, November 1980 DASB, p 8

Future of CAS

The immediate and long-term future of the Cost Accounting Standards, rules, and regulations is uncertain. Several alternatives exist:

- incorporate the CAS Board function in GAO.
- appropriate funds to the original authorizing legislation,
- transfer certain CAS Board functions to the executive branch, and
- maintain the status quo.

In November 1977, then the Comptroller General Staats, as Chairman of the Cost Accounting Standards Board, recommended legislation to transfer the functions and standards to the General Accounting Office. This proposal assures the type of independence essential for the continued effectiveness of the standards. Mr. Staats stated that:

Placing the Board's responsibilities in an executive branch agency raises a serious question as to whether such an agency could be sufficiently independent. By contrast, the GAO is by law independent and has the benefit of having viewed the procurement process from that vantage point. Its historical independent role with respect to the procurement function seems ideally suited to enabling it to assume the future responsibilities for cost accounting standards matters. Under the Accounting and Auditing act of 1950, the Comptroller General was directed to prescribe the principles standards and related requirements for accounting to be observed by each executive agency ... The expertise developed in this area will be of great value in carrying on the work of the Cost Accounting Standards Board.2

This proposal would have required cooperation from representatives of the accounting profession, industry, the academic community, and Government. The defense industry had strongly opposed this alternative and contributed greatly to its defeat.

A second alternative is for the Congress to fund the Board's original authorizing legislation. In 1980, the Committee on Banking, Housing, and Urban Affairs wanted to place the continuing activity with an appropriate agency because it believed this would be less costly. With continued congressional emphasis on budget austerity and strong industry opposition, this alternative doesn't seem viable.

The continuing maintenance responsibility for the standards could be transferred to the executive branch, which has been the most widely accepted alternative. However, the Board's functions have not yet been transferred because the concerned parties have been unable to agree on several issues:

- limitations on staff size.
- location within the executive branch.
- exemption from the CAS rules and regulations for contracts awarded under "adequate price competition," and
- prohibition against issuing interpretations or new standards.

In May 1982, the Senate Committee on Banking, Housing, and Urban Affairs recommended transferring several of the Board's functions to the Director, Office of Management and Budget. This committee introduced the "Defense Production Act (DPA) Amendments of 1982; which provided that all standards, rules, regulations, waivers, exemptions, and certain other actions of the Board would remain in effect at the time of the transfer. This statute prohibited the issuance of new standards, although it did authorize the amendment of the standards, rules, and regulations.

If enacted, this legislation would have terminated on September 30, 1984, "by which time it was intended that the cost accounting standards, rules, and regulations would become incorporated into a single government-wide procurement regulation so that they would be integrated fully into the existing system for promulgation, amendment, and rescission of procurement regulations."

To eliminate the CAS at some future time was not the legislative intent. However, if the standards were downgraded to regulations, they would run a greater risk of being crippled by amendments or being rescinded outright without the benefit of the previous Board's open participative process for developing the standards.

At one point, the House Subcommittee on Economic Stabilization, Committee on Banking, Finance, and Urban Affairs recommended transferring several of the Board's functions to the Administrator, Office of Federal Procurement Policy. This subcommittee proposal to amend the DPA contained substantially stronger provisions regarding the issue of the CAS Board issue than did the Senate version. For example, it provided for the promulgation of new standards, but the House Banking, Finance, and

Urban Affairs Committee deleted all references to the CAS Board during a committee markup session. On October 1, 1982, both Houses agreed to simply extend the DPA for 6 months without any provisions for a CAS Board.

The final alternative is to maintain the status quo. Preliminary GAO studies have shown that the standards are widely implemented into the Government procurement process and, in general, defense contractors are in compliance with them. A few problems have been observed in the implementing of the Board's rules and regulations, and a continuing CAS function is required to assist in solving these problems. We will watch with interest the Congress' direction in addressing the future of the Cost Accounting Standards Board.

Wherever the CAS maintenance function is reestablished, it must use the defunct board's operating procedures. A number of authoritative bodies exist to issue pronouncements affecting accounting and financial reporting, but the Board's process of developing standards provided an unprecedented approach that was characterized by an in-depth study of the subject, by participation of numerous interested parties, and by an independent agency ideally suited to ensure uniformity and consistency in cost accounting matters.

²Statement of Elmer B Staats, chairman, Cost Accounting Standards Board before the Committee on Banking, Housing, and Urban Affairs, U.S Senate

³Senate Report No 97-412, p 4

What "Type" Auditor Are You?



Tom Pastore

Mr Pastore has been an evaluator with the Denver regional Office for approximately 4 years Before joining GAO, he was an associate director of the National Center for State Courts, the budget director of the \$100 million Regional Transportation District in Denver, and a project manager with the Mayor's Office in New York City Mr Pastore has a BA degree, magna cum laude, in psychology from Trinity College (Hartford, Conn.) and an MBA degree, with distinction, in management and finance from New York University Like the character in this article, Mr Pastore has a twin brother (who does not, however, work for GAO)

The keyboard. To the pianist, it's an instrument to create melodic rhythms; to the secretary, it's an instrument to create printed messages; and to the auditor, it's usually either an anathema or a management tool.

The time: 1984. The characters: Two GAO auditors—auditor "Know Change" and his twin brother, auditor "No Change."

Auditor Know Change is a progressive leader who taught himself how to typeand enthusiastically welcomes change and office automation as a means of increasing his productivity.

Auditor No Change is a conservative individual who resists change and likes to perform tasks the way he was initially taught and with which he is most comfortable.

Scene 1: A Futuristic GAO Regional Office

At 8 a.m. this Monday morning, auditors Know change and No Change arrive at the regional office and, after getting their usual cups of coffee, go to different work areas. No Change sits down behind his assigned desk; Know Change sits down at an electronic work station (EWS). (An EWS is an advanced word and data processing machine which includes equipment such as a standard typewriter keyboard, a display screen, a control unit, a memory unit plus disc drives, a printer, etc.)

Know Change begins typing the second chapter of his report to the Congress. Having outlined his chapter the week before, he drafts quickly; after only 2 hours of typing, he completes a first draft consisting of 10 typewritten double-spaced pages. He had previously used the EWS's mathematical capability to analyze some of his data and had designed a variety of forms, charts, and graphs with the machine. Since much of his audit material (such as interview write-ups, summaries, charts, graphs, and schedules) is already in the machine's memory, he merely has to "call up" certain files and insert previously prepared information directly into his chapter. He had also used the machine's "sort" capability to categorize workpapers by major topics. Before getting up from his chair for a brief meeting with his supervisors, Know Change instructs the machine to print out a typed hard copy of his draft chapter, which he will edit when he returns in about 10 minutes. Since the draft is now on disc memory, he merely needs to make some editorial and perhaps organizational changes before printing a final, copy that same afternoon. Because deadlines on his job are tight, he will also immediately transmit the entire chapter to the operating group in Washington, D.C. via the EWS's communications device.

On his way to the meeting, Know Change stops by the desk of his twin brother, auditor No Change, who for 2 days has been diligently but laboriously writing out the first chapter of a report. No Change has almost completed his 25-page handwritten draft, which he will then submit to the typing pool. He hopes it will be typed by the next day so that he can begin editing it. Because he performed all his data analysis manually instead of using an EWS, No Change is already behind the work milestone schedule jointly developed with his supervisor. Even though use of the EWS was called for in the assignment plan, No Change didn't want to use the newfangled, unfamiliar machine; just the though of it made his stomach churn and his palms sweat.

While listening to No Change complain about how rushed he is, Know Change reflects on how the differences between the two of them occurred. Both had started with GAO on the same day about 8 years ago, after having been recruited from the same college campus. Both had excellent student records, were conscientious workers, and now were considered good auditors. But Know Change had undertaken a change in operating style a few years ago, when the office received some electronic work stations. That seemingly minor change in style had now become a major reason for Know Change's dramatic increase in productivity.

Know Change had always enthusiastically accepted change, including automated office techniques and methods. He had made a deliberate decision to become proficient in all the capabilities of the new electronic work stations. He had been encouraged by the Information Policy committee's 1980 statement that it was GAO's policy to actively promote the efficient and effective use of

information technology of increase the productivity of its workforce. Similarly, he had heartily agreed with Comptroller General Bowsher's 1982 statement before the 41st International Conference of the Institute of Internal Auditors: "Productivity improvement is the 'bottom line' on the Nation's economic balance sheet. Productivity is not someone else's problem but is a problem in which we all share."

Know Change had long ago learned that auditors must do a considerable amount of "creative" writing in preparing documents, such as interview write-ups, letters, memos, workpaper summaries, reports, and digests. Although the specific audience could differ, the goal was usually the same: to produce an organized, well-written, and timely document that correctly and completely conveyed the message(s). Auditors also performed a considerable amount of mathematical analysis. Since auditors spent about 35 percent of their time on data analysis and written reporting functions, Know Change had reasoned that any method of increasing his analysis and writing speed would make him more productive. In retrospect, he had been correct.

The anxiety in his brother's voice brings Know Change abruptly back to the present. "I don't know what I'm going to do, Know. This job won't be finished anywhere ne arthe target date; my supervisor's already on my back about being behind, and I've been working late almost every night trying to get caught up." Stretching his cramped fingers, No Change sighs and looks at his brother searchingly. "What more can I do?"

Know Change has a great deal of empathy for his brother's situation, so he invites No Change to have lunch with him that afternoon. By giving some brotherly, but professional advice, Know Change hopes to be able to help increase his twin's productivity.

Scene 2: A Local Restaurant Frequented by GAO Auditors

After ordering lunch, Know Change succinctly but bluntly addresses the issue. "No Change, if you'd learn to type you could probably advance your career!" Know Change anticipates his brother's startled expression, knowing well No's opinions on the subject.

"Auditors audit and typists type," retorts No Change, appearing somewhat annoyed. "Furthermore, my handwriting is quite legible, and I've achieved an excellent work record by handwriting all my work."

Know Change knows it will be difficult to convince his brother of the benefits of acquiring typing skills and becoming proficient on the office's automated equipment. Taking a deep breath and a sip of water, he faces the challenge.

"You know, No, you now make excellent use of a hand-held dictating machine. I really helps in you work. But do you remember the resistance you originally had to it? The same applies to typing skills. Let's look beyond your resistance and examine some possible benefits. I'll bet I can give you 10 good reasons why you should learn to type." Know Change proceeds to do just that.

Speedwriting is possible only by typing. "First of all, handwriting is to typing as the tortoise is to the hare. Most GAO auditors appear to perform their writing responsibilities with zeal by taking their trusty pen or pencil in hand and laboriously writing out their messages at the tortoise-like speed of about 15-25 words per minute.

"In contrast, the auditor with keyboard abilities can write with much greater alacrity, at a 'hare-raising' speed of 40 to 80 words per minute, as much as two to four times faster than the tortoise!

"While orally dictating messages into a dictating machine is faster than typing, dictation also has several disadvantages which frequently make it impractical for many of our writing needs. But more about that later."

Organization is facilitated. "Second, by consolidating more sentences, paragraphs, and thoughts on a single page, you can much better organize the message, without having to flip through many pages to check your though flow. Also, by typing the initial draft, you are immediately working with something that resembles the finished product, rather than having to waite for your handwritten draft to be typed. Dictating machines can't offer this advantage, because they don't produce an immediate, tangible record of the message. When dictating, you have to rely on your memory to organize your thoughts and messages.

Editing is expedited. "Third, having an immediate, legible hard copy of your initial draft allows you to start editing right away; in fact, much editing can be done directly on the machine. For example, if you're typing your draft on a word processing machine, you can make changes and move sentences and entire

paragraphs around—even between pages—simply by pressing a key or two. You don't have to bother with the prevalent "cut and paste" technique; no more scissors and scotch tape. Dictating machines don't permitthis flexibility either."

Neatness is a pleasant byproduct. "Fourth, typed documents are easier to read and understand than handwritten ones, not only by the writer but also by the supervisor. Neatness is especially important for auditors (probably the majority) whose penmanship is not very legible."

A permanent record is established. "Fifth, while handwritten workpapers are usually prepared in pencil, typed products are in ink, which provides a permanent record of the message. Furthermore, if you're typing on a machine that has a memory device, as our electronic work stations do, permanent and compact document storage is also available."

Support staff can more easily assist auditors. Sixth, the support staff's task is easier since, having initial product on a word processor with a memory device, the typist merely has to make corrections and adjustments"

Spelling and punctuation are improved. "Seventh, as you probably know, some handwriting is so illegible that writers can often blur or 'fudge' spelling and punctuation of which they are uncertain. Because typing presents a clear picture of words and punctuation marks, the typing writer is compelled to learn proper spelling and punctuation. Such learning is undoubtedly to the writer's long-range benefit, as is the discipline required to acquire the learning."

Electronic work stations can be used more effectively. "Eighth, you can more easily and effectively use an electronic work station, or any word processor, if you know how to type. GAO's 'office of the future' sneaked up on us faster than we anticipated with the introduction of electronic work stations. These machines provide data analysis and word processing capabilities as well as remote terminal access. With these machines, you can rework textual or numeric information and transmit it directly from the field audit site to the home office or the headquarters, if needed.

"GAO's experience with these work stations has clearly demonstrated that using automated technology to gather, analyze, and communicate audit information can help improve productivity. But many of the EWS's capabilities cannot be as effectively used if you lack typing skills."

Computer accessibility is enhanced.

"Ninth, auditors of the future will find that automatic data processing knowledge and skills will become increasingly important in conducting daily tasks. Because computer access is through a standard keyboard terminal, having keyboard skills can assist you in the transition to auditing technologies of the near future.

"Maybe you're a 'cyberphobiac'—a person who hates or fears computers. In the early 1980's, according to professor Sanford Weinberg of St. Joseph's University in Philadelphia, about 30 percent of the people who used computers in their work hated or feared them. 'Cyberphobiacs' suffer the same symptoms as other phobic people, including nausea, sweaty palms, and high blood pressure. Weinberg said that the fear of losing control is one of the main causes of cyberphobia, and can be eased through education about the technology. Keyboard familiarity could be one step in that direction."

Typing is fun! "And last, but not least, work need not always be drudgery; you should try to get as much enjoyment out of your work as possible. And typing can help you do that. Initially, you may not consider typing to be 'fun'; but once you master the skills, you'll find that the mechanical rhythm achieved by using your fingers and hands is a joy-especially when compared to the tedium of handwriting. This fun is further enhanced when you type on an electronic work station, because of the great flexibility it offers. On an EWS you can correct errors, delete or insert material, move sentences and paragraphs around, and much more!"

No Change has been listening patiently to his brother but, as their lunch arrives, takes advantage of the pause. "But I can't type!" he pleads plaintively.

"That's a simple problem with a simple solution," replies Know Change calmly. "I couldn't type either when I first began using the electronic work station. But I learned. It's as easy as learning to ride a bicycle, but without skinned elbows and bruised knees! And once learned, like bicycling, it's a skill not readily forgotten.

"There are several ways you can learn typing skills, that is, if you don't want *me* to give you 'hands-on' instruction," kids Know Change, putting his hands on his brother's shoulders.

"First, you could check with the training coordinator about the possibility of a typing course for interested auditors. Basic typing techniques and practice procedures could be taught within a short period to time. Maybe the course could be taught even in the regional office during duty hours, since the resulting increase in productivity would benefit the office as well as the course participants.

"Another option would be to take a typing course at school. Or you could teach yourself at home with guidance from a typing book, a variety of which are available for purchase in college bookstores.

"Still another way to learn is to ask someone you know to teach you. I'd be happy to show you how, or you could ask another staff member—either another auditor or someone from the support staff.

"Once you've learned the basics—the hand positions and the functions of the typewriter's different parts—all you need to do is practice to build up your speed and proficiency. You can do that during your lunch break or after work on any of the available office typewriters. You could type text from books or even compose letters. Mom and Dad would love to hear from you!"

Scene 3: That Evening in No Change's Living Room

No Change has just finished eating dinner with his family and settles into his favorite rocking chair. The evening newspaper rests on a table beside him, but No Change instead picks up a book on "The Wonderful Writing Machine." The book had mysteriously appeared on his desk that afternoon, a not-so-subtle gift from his brother.

No Change starts to read the history section and finds it fascinating. The need for fast writing that existed centuries ago still exists today. "Listen to this, Honey," he says, and reads aloud to his wife.

Typewriter's Beginnings

The first record of a typewriting device was a patent given by Queen Anne in 1714 to a prominent English engineer, Henry Mill. The patent gave Mill exclusive rights for 14 years to

an artificial machine or method for the impressing or transcribing of letters singly or progressively one after another, as in writing, whereby all writings whatsoever may be engrossed in paper or parchment so neat and exact as not to be distinguished from print; that the said

machine or methods may be of great use in settlements and publick (sic) records, the impression being deeper and more lasting than any other writing * * *.2

Some historians claim that Mill never really invented a typewriter but merely patented anidea. History is unclear about whether the original idea was to fulfill a need for better legibility or speed. However, once the basic idea was established, writing machine inventions began to proliferate.

By the late 1700's, many different versions of a writing device appeared from such countries as France, Austria, Switzerland, Italy, and France. The United States entered the field some years later when President Andrew Jackson granted a patent to William Burt of Michigan in 1829.

Early Machine Failures

William Burt was a member of the Michigan Territorial Legislative Council; as such, he had more paperwork than he could handle involving contracts, correspondence, reports, records, and statements. He needed a method by which to write faster. His attempted solution was an ingenious writing machine, created out of wood, with an assortment of letter type obtained from a newspaper friend. This machine, which he called a "typographer," was based on a principle much like that of the familiar toy typewriter: the type was mounted on a rotating wheel which could be moved around by the operator until the desired letter came to the printing point and was pressed down against the paper with a lever. Although the "typographer" did a pretty good jobits print was neat and legible—it had one serious flaw from Burt's point of view: writing with the "typographer" was much slower than with the pen. Even though Burt was disappointed with the machine, his newspaper friend was not. In May 1829. Burt's friend wrote to President Andrew Jackson:

¹GAO Management News, Vol. 9, No. 44, July 13, 1982, p. 2.

²Bruce Bliven, Jr., *The Wonderful Writing Machine*. New York Random House, 1954, p. 24.

This is a specimen of the printing done by me on Mr. Burt's typographer. * * * I am satisfied * * * that the typographer will be ranked with the most novel, useful and pleasing inventions of this age.³

Despite the patent, nobody was interested in buying the rights to manufacture the machine, so Burt and his friend abandoned the idea.

Other versions also failed due to their lack of speed. One model used a special alphabet of character signs made up of only about half a dozen straight lines, so that only half a dozen keys were necessary. The operator superimposed one impression on top of another and built up the letters individually, obviously an extremely slow process.

In spite of these failures, the need for a faster way to write continued. The pen was annoyingly slow. In 1853 the handwriting speed record was only 30 words per minute!

A Success At Last!

The 52nd person to invent a printing machine was Christopher Sholes of Milwaukee, who is commonly thought of as the typewriter's "father" since his was the first practical commercial machine. After several versions, in 1867 Sholes produced a working machine with pianostyle keys; he called it a "type-writer."

Although Sholes' typewriter permitted a speed of approximately 40 words perminute, commercial and public acceptance of the machine was at first an obstacle. Some people's feelings were hurt by receiving a "type-written" letter; they thought that the printing was an aspersion cast on their ability to read longhand. Even the Government was not interested. Although quite a few bureaucrats were complimentary about the invention, its adoption was out of the question. Every Government agency was bound by miles of red tape prescribing in excruciating detail what records were to be kept and how they were to be kept; nowhere was mention made about typewritten matter.

Fortunately, as newer versions permitted greater machine speed, the type writer's popularity climbed. For example, in 1874, after seeing a demonstration of speed-typing at 57 words per minute, Samuel Clemens (Mark Twain) was so impressed that he paid \$125 for a type writer of his own. He enthusiastically wrote to his brother, Orion Clemens, on December 9, 1874:

I am trying to get the hang of this new fangled writing machine, but I am not making a shining success of it. However this is the first attempt I have ever made & yet I perceive I shall soon & easily acquire a fine facility in its use. • • • The machine has several virtues. I believe it will print faster than I write. * • • It piles an awful stack of words on one page. It don't muss things or scatter ink blots around. Of course it saves paper * * *.4

Mark Twain did become proficient on the machine; in 1876 he became the first American author to submit to a publisher a typewritten (double-spaced and on one side of the paper) book manuscript. That book was entitled *Tom Sawyer*.

By 1909 a total of 89 separate typewriter companies existed in the United States alone. The typewriter was promoted as a safeguard against "pen paralysis, loss of sight, and curvature of the spine."⁵

In 1933 International Business Machines entered the typewriter field by taking over a firm called Electromatic Typewriters, Inc., which had been struggling for a decade to add electricity to the machine. IBM succeeded, and the rest of the typewriter's history is now recent memory.

Despite the rapid technological advances in machine capability, an ancient vestige of the typewriter's long history still remains: the keyboard. Much controversy exists over the reasoning behind the arrangement of the keys, which is considered to be very inefficient. The letters were perhaps intentionally scrambled in an attempt to keep finger speed down to machine capability. Although modern-day machines can print at 400 words per minute, the ancient keyboard still remains, long rooted in the skill of millions of people who resist any change. even though human typing speed could be considerably enhanced through a redesigned keyboard.

Scene 4: The Next Morning at Know Change's Desk

After getting a cup of coffee, Know Change sits down at his desk and is surprised to find a handful of change on top of a typewritten message that mysteriously appeared on his desk. He reads the not-so-subtle note from his brother.

This fistful of "change" represents the "cents" you knocked into my head lately. I'm letting my fingers do the talking from now on. I can finally understand the practicality of typing in my daily work. Now that I know the benefits, I'm eager to change my habits!" Your Brother, kNOw Change, Too.

The year 1984 is not far away. What type of auditor will you be?

³ibid., pp. 30-31.

⁴ibid., p. 61.

⁵ibid., p. 67.



Stephen L. Keleti

Mr Keleti is a senior group director responsible for audits of mass transit and railroad programs in the Community and Economic Development Division Heholds a B S degree in accounting from Saint Joseph's College in Philadelphia and has studied at American University Mr Keleti received the GAO Meritorious Service Award in 1972 and 1973 and was a member of a group that received the General Government Division Director's Award in 1976 for a legislatively mandated audit of the Small Business Administration. He has had several previous articles published in the *GAO Review*.



Joanne E. Weaver

Ms Weaver is a senior GAO evaluator in the Community and Economic Development Division and was project manager for the assignment described in this article. She Joined GAO in 1967 after receiving a BS degree from Indiana University of Pennsylvania. She has done graduate work at George Washington University, is a CPA (Virginia), and is a member of the American Institute of Certified Public Accountants and the American Woman's Society of Certified Public Accountants.

Transportation for the Elderly and Handicapped: The Answer Remains Elusive 025347 | 121159

Making the Nation's transit systems accessible to the elderly and handicapped is a highly controversial issue that has raised many difficult questions:

- Should the elderly and handicapped have the right to expect access to the mass transit facilities used by the rest of society?
- Should transit systems be required to make buses, subway cars, and stations accessible to the elderly and handicapped?
- Should existing transit systems be required to retrofit aging facilities and make them accessible?
- Who should pay for the cost of making transit systems accessible?

In 1970, the Congress passed legislation declaring that the elderly and the handicapped should have the same right as anyone else to use mass transit facilities and services. The much stronger Rehabilitation Act of 1973, passed 3 years later, stated that "no handicapped individual shall be excluded from participating in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

In 1978, the Department of Transportation (DOT) issued regulations stating that new transit facilities had to be accessible to the handicapped and existing facilities had to be rebuilt or retrofitted for accessibility. DOT's regulations meant that all transit systems had to buy buses equipped with wheelchair lifts until at least half of their peak-hour bus fleets had wheelchair lifts; all new rapid-rail facilities had to be accessible; key stations of existing rail systems had to be retrofitted to make them accessible; and by July 1982, interim accessible transportation had to be provided for handicapped persons until permanent transit service accessibility was achieved.

These regulations aroused considerable controversy among DOT, the transit systems receiving Federal mass transit assistance, and various organizations representing the elderly and handicapped. The total cost of making equipment accessible was estimated to be as high as \$9

billion; annual operating costs were estimated to increase by about \$70 million. The antiquated subway systems of New York, Chicago, Boston, and Philadelphia were most affected by these regulations. For example, some transit industry officials believed that the estimated cost of retrofitting New York's transit and commuter rail systems alone would be \$2.5 billion

Many transit industry representatives were concerned that the required changes would also discourage public transit use. They claimed that operating time for buses would be lengthened because of the extra time required to operate the lifts and securely fasten wheelchairs in the vehicle. This could mean that more buses and subway cars would be needed to maintain a reasonable service frequency.

Opponents to accessibility also contended that a door-to-door transportation system would be the most practical for the handicapped. They questioned the usefulness of lift-equipped buses in cases where the handicapped person could not reach the bus stop due to curbs, lack of sidewalks, or bad weather.

But it was the low usage of lift-equipped buses that caused concern in the transit industry. For example, Los Angeles has more than 1,300 lift-equipped buses but the lifts are used only about 13 times a day. At National Airport in Washington, D.C., where handicapped riders telephone for a special bus to pick them up, and average of 4 or 5 handicapped riders used the service each month.

The American Public Transit Association, among others, filed a suit challenging DOT's rule. In May 1981, a Federal court decided that the rule exceeded the authority provided by section 504 of the 1973 act, and returned the regulations to the Secretary of Transportation to determine whether the mass transit accessibility requirements might be authorized by other statutes.

Accordingly, DOT issued an interim rule on July 20, 1981, rescinding the accessible mass transit requirements and substituting a local option approach.

DOT's interim policy is that recipients of Federal assistance for mass transit are responsible for providing mass transportation to the handicapped and that local communities are responsible for deciding how such transportation is to be provided. DOT just requires that financial assistance recipients certify that they are making special efforts to provide transportation to the handicapped. This interim rule will remain in effect until a new, permanent regulation is published. (DOT has not established a formal target date for issuing the permanent regulations.)

Because of the Reagan Administration's philosophy of minimizing Federal involvement in local operations, each community will be responsible for monitoring its own compliance with the interim regulations. The Urban Mass Transportation Administration (UMTA) will take action only if a grantee fails to certify it is making special efforts or if UMTA receives a complaint of noncompliance. The requlations state that noncompliance must be based on a consistent pattern of failing to make special efforts to provide transportation for the handicapped and not just on isolated problems, such as the failure of a vehicle to arrive as scheduled.

In January 1982, members of the Senate Committee on Banking, Housing, and Urban Affairs asked GAO to find out what communities were doing to meet the transportation needs of the elderly and handicapped since the interim rule was issued. All of the transit systems receiving DOT's financial assistance had certified that they were making special efforts to serve the elderly and handicapped. We surveyed 84 of the more than 350 transit systems across the country to find out what these special efforts were and what changes had occurred since the Federal regulations were loosened.

Bus Service

In our survey, we found that 19 of the 84 systems deleted wheelchair lifts from buses that were on order at the time of the change in regulations, and 15 systems that had initiated bus procurements between July 1981 and March 1982 were buying buses without wheelchair lifts.

At the time of our survey, 55 of the systems had some wheelchair lift-equipped buses. The information on the number of systems with lift-equipped buses was somewhat misleading because only 8 systems had lifts on 50 percent or more of their buses, and 15 systems admitted that they either made no use of

or made no special effort to use the lifts. Only 35 systems indicated that they made special efforts to schedule lift-equipped buses on specific routes, and 5 systems were preparing to start such service in 1982.

Only three systems provided liftequipped service on all of their bus routes. Generally, the systems scheduled liftequipped buses on their main routes or on specific routes where the need was identified. Handicapped groups generally consider this limited coverage to be inadequate. They point out that handicapped persons have the same transportation needs as any other individual and that the bus system is, in effect, defining where they can go.

The hours of service on lift-equipped buses may also be limited. For example, one wheelchair user we talked to in Washington, D.C., who normally commutes to work by bus and the subway, told us about an instance where he wanted to attend a public hearing about changes in the local transit system. He had to go home after work and switch to his own specially equipped vehicle because there were no lift-equipped buses scheduled on his route after the hearing.

Thirty of the transit systems are still planning to have at least half of their buses equipped with wheelchair lifts. In fact, 10 of them intend to have all of their buses lift-equipped to eliminate scheduling problems. For a variety of reasons, the transit systems will continue to make their regularly scheduled service accessible to the handicapped. Some had to do it to comply with State laws, some were under pressure from local handicapped groups, and some admitted that, while they believed demand-responsive, door-to-door service was a better approach, in the long run it will cost them less to use lift-equipped buses.

Rail Service

Of the 14 rail systems we contacted, the 3 newest systems (Washington's Metro, San Francisco's BART, and Atlanta's MARTA) are all fully accessible, and they plan to continue accessibility with any new construction. One other system planned to make all of its stations accessible, and two others planned to make 50 percent of their stations accessible. The remaining eight systems either had not yet made any decisions on accessibility or did not plan to provide accessibility beyond the minimal amount

they had at the time the regulations were changed.

Specialized Services

Under the interim regulations, localities may offer specialized services for the elderly and handicapped instead of making the regular transit system accessible. These specialized services generally are paratransit operations which consist of some form of demand-responsive, doorto-door service using buses, vans, or taxis. Of the areas we contacted, 66 offered paratransit service—generally contracted for or operated by the transit system, but in some instances, operated by a local government agency.

No widely accepted criteria exist to evaluate the adequacy of a paratransit service or its comparability to regular transit service. Localities must consider the following factors when evaluating paratransit service:

Eligibility requirements for using the service. A loose eligibility requirement, such as everyone with a mobility impairment or over a specified age, may result in people who are able to use the regular transit service selecting this more costly alternative. This may overburden the available equipment and deny service to people who really cannot use other services. The eligibility requirements for the services we contacted varied from very loose ones (everyone entitled to the elderly and handicapped discount fare on the regular transit service) to very strict ones (only those people who could not use the regular service). Many operators required a medical certification verifying the individual's handicap, and one system required that individuals actually take a test to see whether they were able to negotiate the bus steps.

Advance reservations required. This is a touchy subject with handicapped persons because it denies them flexibility, but service providers claim they would need more vehicles if they did not use advance notice to schedule their equipment efficiently. Most of the systems (49 out of 66) we contacted required 24 hours advance reservations; only four required less than 24 hours. Regular users of the service (such as commuters who use it daily or kidney dialysis patients who have weekly treatments) are generally not subject to this requirement—they notify the operator only when they do not intend to

See ELDERLY, p. 50.

"Shadowing" The Comptroller General



Paul F. Math

Mr Math entered the SES candidate program as a senior group director in the Procurement, Logistics and Readiness Division. He began his career with the Chicago Regional Office and came to Washington via the European Branch. He is a CPA (District of Columbia) and has an M.S. degree in administration from George Washington University. Mr. Math has spent 3 months in the Philadelphia Regional Office working as an assistant regional manager, doing special projects, and shadowing the regional manager. Mr. Math is currently shadowing the Comptroller General.

Grooming new executives for top managerial positions in GAO is the business of the Executive Development Candidate Program. (See GAO Review, Fall 1982.) I am one such candidate and would like to share my experience regarding one of the program's assignments—shadowing.

General Accounting Office personnel are paid to be inquisitive, paid to ask questions when introduced to new programs, assignments, systems, and people—especially people who unexpectedly appear at high-level management meetings with no known invitation.

This inquisitive trait was amply evidenced by many colleagues during my experience as "shadow" to the Comptroller General. Numerous, varied questions were either directly addressed to me, exchanged between participants at meetings I attended, or visually portrayed through inquisitive facial expressions, such as:

- Who is that person tagging along behind and two steps to the right of Mr. Bowsher?
- What is that person at the end of the table doing here; is he cleared for classified/sensitive information?
- If he is part of this meeting, why doesn't he say anything?
- "Does Mr. Bowsher have a bodyguard?" This question arose because my desk was "strategically" located where I could observe everyone entering and leaving Mr. Bowsher's office, as well as those coming up the G Street corridor.
- "Does Mr. Socolar have a second secretary?" My desk was also formerly used by his second secretary.

My assignment also generated a few rumors. "He must be slated for an Associate Director slot in that Division. . . it's the only Division he has visited with Mr. Bowsher." "It is obvious that Defense work will have a higher priority in our work, otherwise, Mr. Bowsher would not have selected a Defense person as his 'aide de camp'."

The more directed questions were asked when people were informed that I was Mr. Bowsher's shadow. These included "what is a shadow; what are your duties and responsibilities; do you really know everything that is happening in the Office; if so, when will the new organization chart be unveiled, what does it look like, and who are the key players;

do you do anything other than sit around and observe Mr. Bowsher? And, I continue to field these types of questions as I move on to different assignments in the Office.

The purpose of this article is to briefly answer some of these questions.

Assignment Genesis

To briefly dispel one rumor, there is nothing mystical about my sudden appearance on the Seventh Floor, and more specifically in the Comptroller General's suite.

Under the Executive Candidate Development Program, a candidate's Individual Development Plan may feature shadowing an agency executive as an assignment or a component of an assignment. My plan proposed, as a high priority assignment, working in a staff position with either the Special Assistant to the Comptroller General or an Assistant Comptroller General. Mr. Bowsher had an interest in assigning potential executives to his staff on a rotating basis with basically the same goals and objectives of the candidate program. When briefed on the program, the parallelism became evident, and the two became one.

Although commonly referred to as Mr. Bowsher's shadow, I actually combined the activities of shadowing, administrative support, special projects, and self-development. This experience therefore represents one way the candidate program provided me opportunities to get an executive perspective on GAO's overall mission and activities.

Goals and Experiences

The Executive Candidate Development Program definition of shadow expands Webster's "inseparable companion or follower" by stating that candidates who shadow top level executives usually attend all meetings with the executive and receive copies of all memoranda, work assignments, etc., directed to or involving the executive.

This definition is a guide, no: fixed criterion. Each assignment is different in that it is tailored to the candidates' developmental goals/needs, as well as the executives' duties, responsibilities and needs. In effect, shadowing may include

anything from one activity—observing a staff meeting chaired by an executive—to an entire assignment with an executive. My primary goals in this activity were to (1) learn as much as possible about the diverse subjects being addressed by top management—internal operating, as well as external reporting issues and concerns— and (2) observe the different managerial and leadership styles, and the decisionmaking processes both on a collective (large and small groups) and individual basis.

My shadowing assignment meant attending the Comptroller General's meetings, discussions, brainstorming sessions, and presentations. The types of sessions I attended included those of a recurring and selective nature. Recurring sessions included the Comptroller General's daily 8:15 meetings with the Special Assistant to the CG and the Assistant CG for Policy and Program Planning where "new assignment starts" were discussed, Office of Congressional Relations' meetings, Program Planning Conferences, report and job review sessions, etc. Selective ones were Consolidated Administrative Management Information System and Electronic Work Station presentations, Comptroller General testimonies, luncheons, brainstorming sessions with the Personnel Task Force and Steering Committee, official ceremonies, Division visits, etc.

Perhaps the most fruitful sessions for me, in terms of observing managers and gaining insights into the process and issues, were the 8:15 meetings and the brainstorming sessions of the Personnel Systems Development Project (PSDP).

The 8:15 meetings were unique in light of the myriad topics confronting the participants on a daily basis. Although I had read about various GAO reports in newspapers, GAO's clippings service, and the Monthly List of Reports, I didn't really appreciate the diversity and depth of our efforts until I heard them discussed at these sessions.

Similarly, the after-hours brainstorming sessions on the PSDP were most enlightening, principally in terms of observing collective decisionmaking by top level managers and consultants in GAO. I was also impressed by the number of intervening variables the participants in both the 8:15 meetings and the PSDP faced when deciding internal management issues.

A Sometimes Frustrating Role

Each shadow's role varies and is normally based upon agreements reached between the executive shadowed, the candidate, and the candidate's mentor. In my case, all parties agreed that, in the interest of efficiency and effectiveness, the silent observor role with the CG would be most appropriate. I would listen and observe, but comment by invitation only.

Although I wholeheartedly supported this decision, I must admit that complying with it represented the most frustrating part of this assignment. It is difficult to assume a passive role when you believe that valuable contributions can be made—and more often than not our egos tell us that our contributions are valuable.

At these sessions, I divided my time between learning more about the subjects being addressed, and when familiar with the subjects, observing the management styles and decisionmaking process. Such time sharing can have its pitfalls because the choice between learning and observing may be ill-timed. If caught in the "other" mode, one could be perceived as being inattentive. In my case, where participation was based on invitation only, I tended to concentrate on observing the process more often than following the subject matter. For example, on a couple of occasions I was evaluating the process when I got caught off guard with an invitation to comment on the subject mater with which I had some expertise. Frustrations aside, the experience was exceptional.

Administrative Duties and Projects

Administrative duties consisted of those tasks specifically performed upon request, and those of a general nature which were designed to reduce the time required by Mr. Bowsher to review and analyze the significant volume of information which he receives as Comptroller General.

This latter effort was accomplished through daily screening, summarizing, and highlighting information such as Office of Congressional Relations' communications, Congressional Record data, general correspondence, periodicals, publications, etc.

Special projects were normally quick turnaround efforts (no more than a week to complete), and basically consisted of requests for information for use in clarifying selected issues or in preparing for presentations, briefings, or discussions.

My assignment with the Reports Task Force, which made an initial evaluation on report timeliness, could be categorized as indirect support to the Comptroller General. Nonetheless, it too was exceptional in terms of the subject matter-a major organization concern for some time-and the process. The process could be described as achieving results through a "leaderless group." Although a chairman was assigned, he was basically an "outsider" who, having been with GAO only a few months, acted as a facilitator. Matters were decided by consensus-no easy feat when the decisionmakers included high-level executives with diverse backgrounds, opinions, sensitivities, and conflicting demands (such as running a division or office), who had to produce a product within 3 weeks. The group worked extremely well together, so well in fact, that Mr. Bowsher asked them to continue to address the issues/options they raised as well as some other related Comptroller General concerns.

Self Development

Self development principally centered on reading as much material as time permitted which was generated for and by the 7th floor. This included a wide variety of reports issued during this period, division issue area plans, testimonies, administrative correspondence, etc. The objectives of this activity were to gain a greater appreciation of all the diverse issues which are addressed by the Comptroller General, while at the same time attain a better understanding as to how seemingly diverse issues tie together.

Conclusion

Shadowing, as either an assignment or activity, represents one means for an executive-development candidate to improve on the managerial and leadership skills expected of effective executives. There was no mystique about my assignment as Mr. Bowsher's shadow. However, because I was the first in a program which is also in its implementation infancy, there were many important and humorous questions asked. And, because of the questions, some revisions have been made in the approach to shadowing.

See SHADOW, p. 50.

No alien land in all the world has any deep strong charm for me but that one, no other land could so longingly and so beseechingly haunt me, sleeping and waking, through half a lifetime, as that one has done. Other things leave me, but it abides: other things change, but it remains the same. For me its balmy airs are always blowing, its summer seas flashing in the sun; the pulsing of its surfbeat is in my ear; I can see its garlanded craqs, its leaping cascades, its plumy palms drowsing by the shore, its remote summits floating like islands above the cloud wrack; I can feel the spirit of its woodland solitudes, I can hear the plash of its brooks; in my nostrils still lives the breath of flowers that perished twenty years ago.

Mark Twain said it over 100 years ago, and although he might no longer recognize the land, his description of Hawaii expresses what most of us in the Far East Branch (FEB) feel about the place where we live and work.

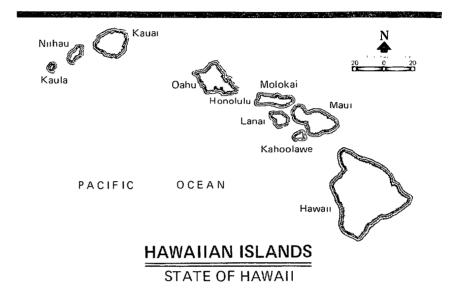
As in the other overseas branches, foreign travel is a way of life here, and our staff usually spends half its time visiting and working in exotic places most people only read about. Time and distances, however, set us uniquely apart from the rest of GAO. For instance, when FEB starts work in the morning, Denver is taking its midmorning coffee break, Washington has just finished lunch, Frankfurt is sitting down to dinner, and our staffers on assignment in Korea are sleeping soundly in the early hours of tomorrow.

Kailua to Kabul

The distances between Hawaii and work locations in Asia are huge. FEB's territory covers almost half the earth's surface—an expanse of almost 100 million square miles of land and water—extending west to Afghanistan and south to Australia and New Zealand. Even Japan, one of the closest foreign work locations, lies almost 4,000 miles and more than 7 hours west of Hawaii.

Traveling throughout this vast area is one of the most exciting and challenging aspects of life in FEB. Consider this list of faraway places waiting to be explored: Hong Kong, Jakarta, Bangkok, Kuala Lumpur, Katmandu. Even less exotic places, such as Diego Garcia, Guam, and Johnston Island have their appeal. Getting there, however, entails problems of time and distance. For example, when a passenger leaves Honolulu for the Phil-

At Home and Abroad in Paradise: GAO's Far East Branch



ippines around midnight on Saturday, he travels through six time zones. When he reaches Manila, his body knows full well that it has been on the road for 12 hours, but his watch tells him it's only 8:00 in the morning, time for a full day's work. Our traveler's calendar tells him something else—that Saturday has sud-

denly become Monday. This magical transformation occurs because of the boundary called the "International Dateline," which can turn a 12-hour trip into a 36-hour odyssey.

The hours stolen by the Dateline are not lost forever. Flying from Tokyo's Narita Airport at 9:30 p.m. on Friday night, one



John Meenan, kneeling, and John Trembler in Seoul, Korea. (Photo by F. Comito)

32

stumbles out of the plane in Honolulu at about 9:00 o'clock Friday morning—12 hours and 30 minutes *before* one left Japan.

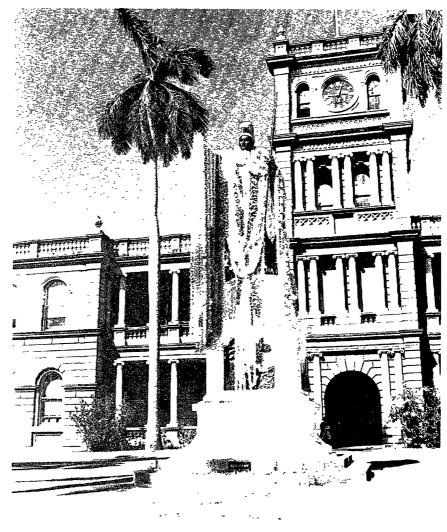
When one adds all this to the lonely hours spent waiting for delayed or connecting flights, misplaced baggage, dehumanizing customs-clearance procedures, and taxi drivers bent on self-destruction, travel in the Far East soon becomes less than glamorous. Most FEB staffers, though, will gladly endure these hardships for the chance to travel to cities and countries they have never seen before

Ua Mau Ke Ea O Ka Aina I Ka Pono

Translated from the Hawaiian, the State motto speaks of the land which from ancient times has been closely linked with Hawaiian spiritual beliefs. The Hawaiian Islands are part of a vast undersea mountain range, higher even than the Himalayas and extending in a northeasterly direction as far as Midway Island. Of the seven principal islands, Hawaii is the largest, while Oahu, the main island, has Honolulu and 90 percent of the State's population.

Hawaii is the transportation hub of the Pacific and a cultural and ethnic crossroads, where the varied traditions and races of Polynesia, the Occident, and the Orient have combined to create an unusual society. The first inhabitants are thought to have arrived more than 1,000 years ago from the Marquesas and Society Islands in southeastern Polynesia. Their crossing several thousand miles of ocean in open canoes stands as one of the more remarkable seafaring exploits of all time. When British Captain James Cook "discovered" the islands in 1778, he found a well-organized, self-sufficient, feudal society. Cook named the archipelago the Sandwich Islands after his patron the Earl of Sandwich, and for many years the islands were so known to the western world. Shortly after Cook's arrival, King Kamehameha I dominated all the islands and moved his capital to Oahu.

In 1820, the first American missionaries arrived from New England. Besides introducing Christianity, they represented the first of several migrations which led to the present cosmopolitan character of Hawaii's people. Following Cook's arrival, the introduction of western diseases and liquor and a breakdown of the ancient morality created chaos. The missionaries gained great success because they



King Kamehameha I united the Hawaiian Islands and started the Kamehameha dynasty. (Photo courtesy Hawaii Visitors Bureau)

aligned themselves with the chiefs against some of these evils. Perhaps the strongest instrument of change proved to be agriculture. On Oahu, which had more than half of Hawaii's best agricultural land, sugar companies consolidated landholdings, introduced irrigation, and imported large numbers of laborers. Henceforth, the economic fortunes of the islands and the sugar industry rose and fell together.

The Kingdom of Hawaii that Kamehameha established lasted until 1893, when it was deposed in a bloodless revolution. The provisional government then converted Hawaii into a republic and requested annexation by the United States. Hawaii became a U.S. territory in 1900.

For Hawaii, 41 years later, the trauma of World War II went beyond the tragic events of Pearl Harbor. Quickly mushrooming into an armed camp, Hawaii became the nerve center of America's entire Pacific struggle. The islands played a major part in supporting America's role in the Korean War, while during the Vietnam era they were a rest and recreation area for combat troops.

On August 21, 1959, Hawaii joined the Union as the 50th State. The decades after statehood have produced unprecedented growth and change. Rapidly developing air transportation, culminating in larger and faster jets, has brought more and more visitors here: an average of 10,000 a day. Tourism has become Hawaii's largest source of income, followed by Federal military expenditures. In 1980, tourism poured more money into the economy than all legal agricultural products combined.

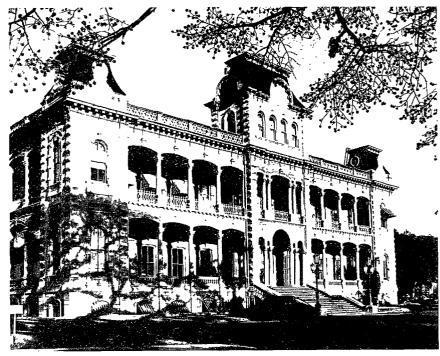
Hawaii's wide range of ethnic groups reflects successive waves of immigration. Numbering almost 300,000 when Captain Cook arrived in 1778, Hawaii's population, ravaged by foreign diseases, was only 54,000 a century later. Before long, however, the population began to increase due to the growing sugar industry's demand for plantation workers and the rush to import laborers to expand crop production. Starting in 1852, Chinese, Japanese, Portuguese, and Filipinos were brought in under contract, thus beginning the stream of labor into Hawaii that continued until 1946.

If the name Oahu means "gathering place," it fits, for Hawaii is truly the gathering place for a myriad of races and people. Ethnically, the population is quite diverse, as shown in figure 1.

This amalgamation of races continues as people come here from Indochina, Samoa, the Pacific islands, the Philippines, and the U.S. mainland. In addition, tourists visit from around the world.

From Tokyo to Honolulu: The History of FEB

Since its establishment in 1956, the FEB has undergone several organizational changes. At present, its one office in downtown Honolulu coordinates all GAO's Far East activities. First established in Tokyo in 1956 under the direction of the Defense Division, the office had responsibility for carrying out GAO's work in all Department of Defense activities throughout the Far East. This area then included Japan, Formosa, the Philippines, the Mariana Islands, Cam-



Iolani Palace, home of Hawaii's reigning monarchs, is better known as the Governor's Palace on Hawaii Five-O. (Photo courtesy Hawaii Visitors Bureau)

How to say "hello" in some of the languages of the Far East/Pacific Basin

Chamorro (Guam)	HAFA ADAI
Hawaiian	
Indonesian	SELAMAT DATANG
Japanese	IKAGA DESKA
Korean	ANNYONG HASIMNIKKA
Kurdu (Pakistan)	SALAM
Malay	SELAMAT
Singaporean	HELLO
Tagalog (Philippines)	KUMUSTA KA
Thai	SAWADEE KRUP

Figure 1 Hawaii's Ethnic Profile

Ethnic Groups	Percent
Caucasian	27.7
Japanese	26.6
Hawaiian and part Hawaiian	17.7
Filipino	10.2
Chinese	4.3
Mixed other than part Hawaiian	9.2
All others	4.3
	100.0

bodia, Laos, Vietnam, Thailand, and countries as far east as Pakistan.

The branch's activities expanded in 1961 to include Civil Division reviews of economic assistance to Asian countries.

Nevertheless, FEB continued to operate under the Defense Division until the International Operations Division (now the International Division) was established in August 1963. Since then, FEB has remained under the International Division.

In August 1965, FEB moved its headquarters to Honolulu. Then its geographic area of responsibility broadened to include Hawaii (previously directed by the San Francisco Regional Office), Australia, and New Zealand.

In August 1966, a suboffice was opened in Saigon, where GAO audited in a combat area for the first time. This suboffice concentrated on activities within Vietnam.

Saigon's effectiveness led to the establishment of another suboffice, initially located in Manila. Here, GAO staffers carried out fieldwork not only in the Philippines, but also in Laos, Thailand, Burma, Malaysia, and Indonesia. Since much of this suboffice's work occurred outside the Philippines, it was transferred to Bangkok in 1972. Meanwhile, the Vietnam War was ending, and in December 1973, that office officially closed.

The Bangkok office thereupon became FEB's only suboffice. This office operated until June 1982, when its responsibilities and staff moved to FEB headquarters in Honolulu.

The Staff

Before 1975, no regulation limited an evaluator's stay in the branch. Since then, all audit staff receive an initial 2-year assignment, while some may be given



FEB's lifeblood, the administrative staff. From I to r: Aloha Hanohano, Jane Uyeno, Janet Sasaoka, and Wini Murakami. (Photo by F. Comito)



The FEB management team discusses future assignments. From I to r. assignment manager Lee Furr, assistant branch directors John Payne and Jim Abts, and the director Vic Lowe. (Photo by F. Comito)

the option of remaining an additional 2 years. After 4 years, they are reassigned to the mainland.

Given this staff rotation and staff selection through agencywide competition, the office enjoys real diversity. Of our current 29 audit staff, less than half come from Washington, D.C. headquarters; the remainder are from the regions. Boston, New York, Philadelphia, Norfolk, Cincinnati, Chicago, Atlanta, Dallas, Denver, San Francisco, and the Washington Regional Office all have representatives here. Four people are also former members of the disbanded Bangkok suboffice and are completing their 4-year tours here.

Four permanent support staff mem-

bers help the Honolulu office in its work. Unlike the audit staff, they are all hired locally and need not rotate out. Indeed, they bring stability and continuity to our office. Each indispensable support person has served the branch for at least 10 years.

FEB At Work

U.S. Interests and Presence In Asia and the Pacific

The United States has important military, economic, and strategic interests in the Asian-Pacific area. Besides its role in five major collective defense arrangements, our country has agree-

ments with two nations which allow U.S. Forces to lease bases and other facilities. Commerce with Asian-Pacific countries accounts for about 25 percent of all U.S. foreign trade and exceeds our business with the European Economic Community. The flow of oil through the Indian Ocean sea lanes also critically concerns us. About 95 percent of the Middle East's production traverses this area to reach oil-importing countries. Thus, we need to keep this area politically and economically stable.

Focus on FEB Work

The branch works in several issue areas and for several divisions. This variety reflects the growing importance of Asia and the Pacific to the United States. Our evaluations have covered military readiness, security assistance, international trade and finance, development assistance, U.S. territories and trusteeship, and energy issues.

Military Readiness

The Pacific Command, geographically the largest of the four U.S. unified military commands, is based in Honolulu. The command includes two subordinate unified commands (U.S. Forces, Japan and U.S. Forces, Korea) and three service component headquarters in Hawaii (U.S. Pacific Fleet, U.S. Pacific Air Forces, and the Army's Western Command). The Pacific Command defends U.S. national interests in the Pacific and Indian Ocean area and represents the United States in five major collective defense arrangements: mutual defense treaties with Japan, Korea, and the Philippines, the Manila Pact, and the ANZUS treaty with Australia and New Zealand.

As part of our work in military readiness, we recently evaluated U.S. Forces in Korea. FEB has also audited fleet readiness in the Pacific and considered the Air Force's capability to logistically support operations in Asia.

Security Assistance

Because security assistance is essential to our national security and foreign policy, we help our allies to acquire, use, and maintain self-defense. In fiscal year 1983, almost \$1 billion in security assistance programs will go to several countries in FEB's area of concern. These programs range from a \$20,000 grant to Papua, New Guinea, for military education and training, to \$275 million in for-



Frank Comito inspects an M-48 tank, part of the U.S. prepositioned war reserve stock in Korea. (Photo by J. Meenan)

eign military sales credits to Pakistan. Our staff recently led a worldwide review of the overseas management of the security assistance program involving 14 countries. Past reviews in security assistance considered how the United States consults with its allies in mutual security matters, the Taiwan Relations Act, and the U.S. security assistance program in Korea.

Economic Assistance

Between 75 and 80 percent of the poor people of the world live in the Asian-Pacific area, and their needs are dire. Most direct U.S. assistance comes through the Agency for International Development (AID) programs, which emphasize food production, health care, population control, and energy development. In this region, AID concentrates on economic and social growth and alleviating poverty. Other U.S. departments and agencies administer development assistance programs involving food and health. Our country also participates in United Nations' agencies that aid development as well as in multilateral development banks.

In this issue area, we have evaluated the effectiveness of U.S. efforts to channel and manage its development assistance resources. Recent reviews have focused on post-harvest food losses, trade strategies in less developed countries, host-country contracting procedures, and U.S. participation in the International Fund for Agricultural Development Bank.

U.S. Territories and Trusteeship

The U.S. territories of American Samoa, Guam, and the Trust Territory of the Pacific are in our work area. These territories depend heavily upon Federal financial assistance to operate their governments, finance their capital improvements, and develop their economies. In fiscal year 1981, Federal assistance totaled about \$400 million through direct appropriations, grant programs, and taxes. In addition, the Department of Defense maintains facilities on some of these islands.

FEB's work in the territories covers several issue areas. The staff recently evaluated the fairness of how electric power is provided to military and civilian users on Guam, as well as the effectiveness of (1) Guam's income tax collection system, (2) Federal comptrollers' execution of audit responsibilities in the U.S. territories, and (3) U.S. efforts to prepare the trust territories for self-government.

Base Rights

The United States has agreements with foreign governments authorizing our military forces to use bases and other facilities in their countries. Besides direct payments, generally in the form of secu-

rity assistance, we also pay for updating, constructing, operating, and maintaining these facilities.

In the Far East, the United States has agreements for basing in Diego Garcia and the Philippines. We will spend approximately \$825 million upgrading the existing facilities, building an anchorage, and expanding the Diego Garcia airfield. FEB is currently reviewing the Navy's construction plans for Diego Garcia.

Since 1947, the Philippine Islands have provided major support and basing facilities for U.S. forces. Under a 1979 agreement, the Republic of the Philippines is to receive about \$500 million in security assistance payments over a 5-year period. In addition, the U.S. spends about \$350 million annually to operate and maintain these facilities. FEB will be evaluating pertinent issues in this current agreement, which comes up for review in 1984.

Energy

The everchanging energy situation touches every Asian and Pacific country according to particular energy requirements. The branch has responded by helping to analyze how this situation affects our country and its energy policy.

FEB staff members have also reviewed the federally assisted alternative energy projects of the State of Hawaii. The state plans to use its indigenous, renewable energy resources (geothermal, solar, wind, ocean thermal, and biomass) to



The Trust Territories crew. Standing I to r: John Wooditch (ID headquarters staff member), Thad Hecht, Tip Blue, Charlie Culkin, and Doug Toxopeus Front: Ed Young. (Photo by A. Lee)



A view of Diamond Head from Waikiki. (Photo courtesy Hawaii Visitors Bureau)

eliminate dependence upon imported oil. Although the geothermal project is promising because the Hawaiian Islands are volcanic cones and have great geothermal energy potential, the technical, economic, and environmental problems still exist. For example, the project's success necessitates transmitting generated power from the less-populated island of Hawaii to populous Oahu, but the necessary submarine cable would operate at depths (7,000 feet) and over distances (150 miles) never before attempted.

Other Issues

FEB has worked for most GAO divisions, covering issues from seafood product quality to the taxation of individuals overseas. We've had significant roles in GAO reviews of refugee programs, including resettlement efforts, conditions at transit centers and resettlement camps, and the health of refugees resettling in the United States.

Reviewing the administration of the foreign meat and poultry inspection program gave us rare travel opportunities and an unusual work environment. This review aroused keen interest because of a recent discovery that Australian horse and kangaroo meat had been substituted for beef exported to the United States. The staff spent 6 weeks in Australia and New Zealand, where the team met with U.S. agricultural attachés and ambassadors and visited meat slaughter and processing plants.

FEB At Play

Between the long-distance flights and concentrated work schedules that are

part of foreign travel, our staff enjoys the scenic and cultural riches of the Far East and the Pacific Basin. On weekends, we have visited Mt. Fuji, the Khyber Pass, the Taj Mahal, Panmunjom, Bali, Hong Kong, Singapore, and Australia.

When not on the road, FEB staff have a full range of leisure activities available to them in paradise. Hawaii is best known for its ocean competitions in surfing. But for those who care to enjoy the water at a more unhurried pace, there's swimming at one of Oahu's many beautiful beaches, where staff picnics are frequently held. Besides permitting boating and deepsea fishing, the surrounding ocean provides a breeding ground for tropical reef fish and sea turtles, which enhances snorkeling and scuba diving in many nearby bays.

Just inland from the beaches are the islands' beautiful green mountains, laced with hiking and hunting trails amid a profusion of colorful flowers. Some of the staff and their families hike in the mountains and camp in the many convenient national, State, and municipal parks.

Hawaii's ideal weather lends itself to many outdoor activities in which the staff participate. These include our annual golf outing on a lovely course overlooking the ocean, the annual touch football "mustard bowl," and occasional volleyball games. Last year our softball team, composed of staff members, spouses, and others competed in a city league. The team was known as the "Hapa Haoles" which literally means "Half Caucasian."

Honolulu has the greatest per capita number of runners/joggers of any city in the world, and throughout the year FEBers have competed in dozens of events. Last year, four of the staff finished the Honolulu marathon.

In addition to our get-togethers after the staff's athletic outings, we mark rotations and promotions with an officewide celebration. Notwithstanding the substantial amount of travel involved in an FEB assignment, there are enough festivities the year round to accommodate everyone's busy schedule. Last year's Christmas party was a Hawaiian luau and Polynesian show on one of Oahu's beaches.

Honolulu's cosmopolitan residents celebrate such holidays as Chinese New Year, Japanese Cherry Blossom Festival, St. Patrick's Day, Kamehameha Day, and Fiesta Filipina. Despite the warmer climate, Christmas trees are as much a

part of Christmas in Hawaii as they are on the mainland. Large shipments of Christmas trees are brought in from the Pacific Northwest.

Although the luau is probably the best known of Hawaii's gastronomic traditions, Honolulu offers an extraordinary assortment of cuisines. Here one can find American, Chinese, Filipino, French, German, Greek, Hawaiian, Italian, Japanese, Korean, Mexican, Polynesian, Thai, and other restaurants.

At night, Honolulu's downtown and Waikiki sections offer a range of entertainment and nightlife rivaling that of any large city on the mainland. Waikiki is perhaps Hawaii's biggest attraction and is the place where most of our 3.9 million visitors stay. Statistics indicate that travelers are pleased by what they have found: about 40 percent of Hawaii's visitors make return trips.

No tour in FEB would be complete without visiting the other Hawaiian islands. Each island offers unique, scenic splendors. These wonders include the island of Hawaii's Volcano National Park, where, from time to time, Madam Pele awakens to shower the countryside with glowing lava; Maui's Haleakala Crater, the "House in the Sun," 10,000 feet about sea level with a magnificent view of the sunrise; and Kauai's Waimea Canyon, the Grand Canyon of the Pacific.

Mark Twain might not recognize the Hawaii he knew in the 19th century, given all the recent modernization. Nevertheless, his description still holds true for much of Hawaii. And for us in the Far East Branch, it's more than just paradise or a temporary residence. It's home.



Rainbow Falls on the island of Hawaii. (Photo courtesy Hawaii Visitors Bureau)



George E. Breen, Jr.

Mr. Breen joined GAO in 1973 and is currently with the Defense Budget Task Force His former position was executive assistant to Mr. Thomas D Morris, Advisor to the Comptroller General for Defense Matters Mr Breen was GAO's 1980 representative to the President's Executive Exchange Program and served as the Special Assistant to the Director of Corporate Budget of Sterling Drug, Inc. Mr Breen holds an MS in operations research from George Washington University and an M A in mathematics/statistics from the University of Maryland His B A is in mathematics from Boston College He is a member and past Chapter President of Omega Rho, the National Honor Society for Operations Research.



Donna M. Heivilin

Ms Heivilin is manager of the Defense Budget Task Force She came to GAO's Financial and General Management Studies Division in 1974 from Department of Army Headquarters Prior to joining the Defense Task Force, she was a group director with the Program Analysis Division Ms Heivilin received a B A from the University of Minnesota and an M P A from George Washington University She represents the American Association of Budget and Program Analysts on the National Council of Associations of Policy Science

Is There A Greater Role for GAO in Analyzing the Defense Budget?

Given the Federal Government's centralized organization, important decisions in Washington involve budget and resource allocation. Because of our Nation's current preoccupation with tight budgets, deficit spending, huge increases for the Department of Defense (DOD), and across-the-board cuts almost everywhere else, the Congress wants to know if these hundreds of billions of dollars are being wisely spent. Thus, the budget now serves as a powerful management tool to investigate, evaluate, and control spending priorities, procedures, and results. In this regard, GAO has a splendid opportunity to serve the country's need for accurate information on this vital issue. We can meet this need only if we examine our task with fresh vision and accept the complex challenges implicit in the Federal budget as a whole and in DOD's portion in particular. Accordingly, we will argue that GAO can handle these challenges and that, indeed, we are beginning to do so already. After briefly discussing current congressional budgetary concerns, we will consider the Comptroller General's response. Then we will describe the work of the Defense Budget Task Force and show how it serves GAO's mission in this area.

Congressional Concern

Over the past few years, the Federal budget has so consumed congressional attention that little remains for other legislative matters. The most pressing budget issues include

- allocation decisions,
- deficit size,
- off-budget spending,
- effect of credit and other spending not readily apparent in the budget materials,
- time periods, their appropriateness, and the rationale for biennial budget,
- · redundancy of decisionmaking,
- the decisionmaking process,
- accountability or the lack thereof for spending,
- estimation practices and underlying assumptions, and
- use of the budget to install management reforms.

These issues become even more urgent given the public's increased inter-

est and concern. Newspaper and magazine articles, along with radio and television discussions, reflect and focus this expanding public controversy. As the number of people discussing budget and budgeting issues grows, their knowledge increases. This increased sophistication recently appeared in debates on how to categorize the spending of Federal monies. How spending is divided frames the argument over resource allocation and determines what issues are raised.

Recently the Comptroller General contributed to this national discussion by suggesting that the budget be resectioned in terms of seven policy areas. These areas are

- investment in capital assets, both defense and domestic,
- · research and development,
- aid to State and local governments,
- credit assistance,
- entitlements for individuals,
- interest, and
- operating expenses.

Each category involves large portions of the Federal budget and requires different planning, financing, and management approaches.

As the Comptroller General pointed out, one could restructure the budget in many ways. For example, one might use another set of categories: national defense, international programs, domestic programs, and interest. These categories would globally indicate our budget priorities.

No matter how one resections the budget, a major portion of Federal spending goes to defense and warrants close GAO attention. Review of the Budget Functions reveals the National Defense Function as second only to income security in magnitude of spending.

The 1982 Congressional Budget Resolutions proposed a sharp reduction in Federal spending growth and a dramatic shift in relative spending priorities from non-defense to defense programs. The annual growth of Federal outlays was to be held at 5.4 percent during FY 82 to FY 84, but the national defense share was to increase from around 24 percent in FY 81 to 31 percent in FY 81 to \$159.8

billion. According to recent projections of the Congressional Budget Office (August, 1982), national defense outlays will grow by 18 percent in 1982, 14 percent in 1983, 13 percent in 1984, and 11 percent in 1985. The 1985 projection places national defense outlays at \$281 billion, which is 31 percent of the total projected Federal outlays and 6.8 percent of the projected gross national product (GNP), up from 5.5 percent of the projected gross.

The Focus of GAO Work

As an organization, GAO's approach towards examining aspects of Federal spending has evolved from routine examinations to its current procedures. The bulk of GAO's work responds to perceived or predicted congressional needs; the effectiveness of GAO's products depends on their congressional use. As the congressional focus shifts, so GAO has begun to shift the focus and packaging of its work to help the Congress during the budget debates.

Since the reorganization which restructured the Defense Division along functional lines, GAO has concentrated on programmatic reviews, often spanning several fiscal years. Thus, the organization had developed expertise along selected programmatic lines. But the Reagan administration's strong commitment to revitalize our defense presented a new challenge. Within two months after taking office, the administration proposed substantial additions to both the 1981 and 1982 Defense budgets. This totaled approximately \$33 billion more than the increases which the previous administration had already approved.

In light of the administration's unprecedented actions, the Comptroller General decided that GAO must direct more of its resources and analysis toward the Defense budget. Accordingly, the organization had to prepare itself to comment on the entire Defense budget. To address this need and deliver work directly applicable to the budget debates, the Comptroller General formed the Defense Budget Task Force.

GAO's Experience in Commenting on the DOD Budget

The Task Force was a multidivisional response. Divisions and regions supporting the effort provided people with extensive experience in either personnel, operations, investments, or budget

analysis. The first year's effort had two basic thrusts. First, we identified, developed, and implemented an approach for analyzing the effects of the proposed spending. Second, we discussed our efforts with various committees to learn how GAO could better help congressional budget analysis.

Assessing the Impact

Our approach depended upon the time available. Although the Task Force itself was not officially established until August 7, 1981, its report had to be ready for the spring authorization markup.² Consequently, the Task Force used ongoing and recently completed assignments, while its members concentrated on areas the divisions were not currently reviewing.

For its focal point, the Task Force chose DOD's increases since fiscal year 1980. This had two practical benefits:

- It limited the portion of the Defense budget which the Task Force would examine, and
- It provided programs which could be audited, since fiscal year 1981 would end midway through the evaluation.

Also, fiscal year 1980 is the last of the post-Viet Nam Era budgets; and both the Carter and the Reagan administrations had proposed increasing defense expenditures in fiscal years 1981 and 1982.

From this perspective, the Task Force selected the issues which it would address. Basically, we followed a topdown approach. During the election campaign, the hostage situation in Iran, coupled with the abortive rescue attempt, prompted constant questions about the condition of the United States' fighting forces. Some believed that troop readiness and fighting capability were deteriorating. Reagan campaigned and won on a commitment to change. He promised to begin the task of rearming. The \$33 billion increases represented a first step towards fulfilling that promise. The key phrases used for justifying the additional funding were improving the quality of life for the soldiers, improving the readiness and sustainability of the forces, and modernizing the forces. We used these same criteria to assess the effect.

Difficulties arose almost immediately. When the additional funding request was being compiled, supporters quickly realized that using the above key phrases greatly improved the chances of having the request approved. Consequently, much was justified because it supposedly helped improve readiness, quality

of life, or sustainability. The challenge was in measuring what, if any, effect the additional funds had.

This problem is not unique to this specific funding request, but rather pervades the entire Defense budget, DOD neither reports nor measures its performance against the justification used, unless specifically requested to do so. Consequently, if voters were to demand an accounting in terms of how much readiness, quality of life, and sustainability had improved DOD could not give one. Certainly, DOD could report that the funds had been spent. In most cases, they could also say the funds had been spent along lines which should positively influence those factors, but they could not report concretely on the degree of improvement.

In essence, the Task Force saw limited accountability. This situation further complicated our task, because we could not fully assess the effect of additional funding on our overall Defense capability. This lack of accountability, coupled with the results of ongoing assignments, suggested that DOD was using money as a panacea for its ills. In some cases, management initiatives, not necessarily more money, would probably have helped alleviate the problem. For example, DOD had increased its request for spare parts to almost \$7 billion. This represented a \$4 billion increase since 1980. Yet GAO has reported that many of the spares' shortages could be alleviated through better management practices. In other instances, accounts, especially those which support the day-to-day operations of the forces, are so decentralized that even the Service Headquarters may not know what is actually being done. We also observed projects, such as building rehabilitations, which we believed were of questionable urgency and only marginally associated with quality of life, readiness, or sustainability.

Both the written report and committee briefings focused on the budget. Appropriation accounts, fiscal year amounts, and line items and their amounts were identified where possible.

¹Testimony of Charles A Bowsher before the Committee on Governmental Affairs, United States on S 2629, the Budget Reform Act of 1982, Aug 19, 1982

²For a description of Task Force members' experiences in writing the report, see this issue's article entitled "Report Writing—Fun or Drudgery? Experiences on the Defense Budget Task Force." by Werner Grosshans

The Comptroller General received many comments encouraging him to continue this type of effort. The report itself and the briefings for the Committee staffs were well received. Overviews, such as the Task Force report, put individual programs in better perspective. Although many in the audience had specific areas of interest, most welcomed a single session, overall assessment from GAO on the direction and consequences of DOD spending. Understandably, some questions became rather detailed. And so we supplied the names of GAO divisional personnel who could serve these individual interests. This is an example of how GAO can flexibly respond to congressional needs.

Providing Additional Assistance to Congress

The Comptroller General discussed the Task Force efforts with Congressmen, in committee hearings, and with professional associations. Reactions to the GAO's Task Force efforts were positive, but the Congress wants more. They want GAO to relate information to the way the Congress makes its budget decisions and noted some overlap among the different Congressional Committee's needs. Both the Appropriations and the Authorizing Committees, for example, request information relating DOD's performance to the current and past fiscal year's budget allocations and the future year's budget request. They wish to know what the nation bought with its defense spending and what it will buy with the proposed budget. The Budget Committees are most interested in identifying long-term financing issues, available options, and financial implications. The Authorizing, Appropriations, and Budget Committees cover both long- and short-term financing issues, and want information on the available options and their financial implications. But there are differences in what each Committee considers as significant amounts. The Budget Committee, for example, deals in billions, while the other Committees deal in hundreds of thousands and millions.

The Task Force believes GAO could be more responsive towards addressing the specific budget information needs of the different committees without jeopardizing its independence. Meeting these requirements is not a one-time effort. Consistent with the Comptroller General's directions, the Task Force will concentrate this year on

- determining whether Congress, DOD, Services, and Commands have sufficient information to ascertain if DOD is making adequate progress toward achieving its short-and long-term objectives,
- identifying systemic problems that need correction in DOD's planning, programming, and budgeting, including developing and incorporating an execution feedback loop,
- identifying historic DOD baseline data for major programs, missions, and accounts to help analyze current programs and assess the reasonableness of out-year projected force levels and budgeted amounts,
- assessing management control of outlays, and
- evaluating the effect of program instability.

To date, the proponents of scaling down the proposed increases lack a unified platform. Even administration supporters question the need for continued sizable increases. Both groups are seeking ways to reduce expenditures without weakening our defense capability. According to the Comptroller General, this Task Force project, together with established reviews by the divisions, could heighten GAO's responsiveness to the Congress.

The Comptroller General's commitment remains unmistakably clear. Under his leadership, GAO will strengthen its capability to review DOD's budget submissions and identify programs for quick analysis, thereby giving more help to the Congress during its budget review. In supporting GAO's FY 83 budget request, Mr. Bowsher identified defense as an area of special program emphasis.3 The approaches and strategies being used to address these questions vary from using the well-known GAO audit approach techniques to developing and analyzing trend data. In one case, a GAO-DOD Joint Study is being launched.

Where this will lead GAO in analyzing the Defense budget is not yet clear. Our new direction will evolve as we find out what works best in GAO and concurrently better satisfies the Congress. As the Congress uses the results of this work. their questions will change, and so will our process and the data we examine. What remains is the results and accountability orientation. What is new is the use of the budget as the main theme. This theme uses the central decision process, with budgeting as a guide, in organizing and structuring the work, determining the issues, analyzing the data, organizing the reporting, and setting reporting dates.

³Testimony before the Subcommittee on Legislative Branch Appropriations, Committee on Appropriations, House of Representatives, Mar. 9, 1982

Werner Grosshans

Mr Grosshans is the deputy director of the Procurement, Logistics and Readiness Division He joined GOA's San Francisco Regional Office in 1958 and became its assistant regional manager in 1967. He joined the U.S. Postal Service in 1970 as Assistant Regional Chief Inspector—Audit, then rejoined GAO in 1972 in the former Logistics and Communications Division Mr Grosshans held positions of increasing responsibility in that division until being named the PLRD deputy director in 1980. He received a B A in accounting from San Jose State College in 1958 and an M S in business administration from George Washington University He also attended the 10-month residence course at the Industrial College of the Armed Forces Mr Grosshans is a CPA (California), a member of the California Institute for CPAs, and the Northern Virginia Chapter of the Association of Government Accountants

Report Writing—Fun or Drudgery? Experiences on the Defense Budget Task Force 25349

During their careers, all GAO evaluators are going to be involved in writing some type of report. How can we approach this particular task? That is the key question which determines our success in the writing aspect of audits and evaluations.

The key to being a good report writer, and a good evaluator, is a simple one: outlook. If we approach report writing as being fun—a challenge—then the right types of energy and talent are channeled into this very important phase of auditing. If, on the other hand, report writing is viewed as an undesirable chore, somehow it never gets finished on time. The draft gets delayed, it gets "bounced around," and it never really manages to engender the level of enthusiasm that should exist during the audit's writing phase.

In this article, I'd like to relate an interesting experience I had as a member of the Defense Budget Task Force, working with the Comptroller General on a key writing effort in GAO. This task force could have encountered major problems while writing its report. But the group remained enthusiastic and flexible, and the problems of report writing under tight timeframes were never insurmountable. I hope readers can relate some of our experiences to their own, and thereby make those necessary writing jobs more enjoyable.

Writing Under Time Constraints

The Defense Budget Task Force, established in 1981, was given a very definite charter: to assess the large increases in defense budgets and expenditures and to ascertain whether the Department of Defense (DOD) was prudently using these funds. To meet its responsibilities, the task force had about 2 months to get organized, do the proposal work, scoping, and planning, and about 6 months to do the actual audit work, brief DOD and the committees, assist the Comptroller General with testimony, and issue a final report.

This 8-month undertaking, needless to say, was an enormous one. We gath-

ered data very quickly, using audit information that other GAO divisions dealing with DOD had already obtained. With some added planning, we were able to "piggyback" on assignments already underway. One should recognize at the outset that normal GAO audit procedures, testing, and sampling techniques were not viable for this job; time simply did not permit them. Therefore, the report-writing phase was extremely important; the quickly gathered information had to be presented logically and cohesively.

Our views on the major issues crystallized early in the audit; however, we gathered data right to the last moment. With a wealth of information to be synthesized into key issues, we assigned different writers to develop the separate chapters. Each writer followed a writing format designed by the task force, so the individual chapters fit together quite well.

We all felt very good about the report. What we did not know was how the Comptroller General would react to it. What better way to find out than to give him an opportunity to review the report?

Feedback from the Comptroller General

We hand-delivered a draft—hot off the word processor—to Mr. Bowsher's home at about 9:00 p.m. on Friday. The report had involved a tremendous team effort by the evaluators and the secretarial staff, not only from the task force, but also from the Procurement, Logistics and Readiness Division, the Mission Analysis and Systems Acquisition Division, and the Program Analysis Division.

By Monday morning the anxiety level had reached a climax. The \$64,000 question was, would the Comptroller General be happy with the report? We did not have to wait too long.

Monday morning at 9:00 a.m., I received a call from Mr. Bowsher's office to come up and meet with him. The Comptroller General interrupted a meeting already in progress to discuss with Don Horan (the

¹In a future issue, the writer plans to discuss a conceptual framework for report writing

PLRD director) and me his reaction to the report. Mr. Bowsher felt this review of DOD's budget was such an important issue that he wanted to get the message into just the right format. He asked if we would mind trying something new in terms of writing this type of report. After overcoming the initial shock, I naturally assured him that we would be happy to try something new. I hope my poker-playing experience paid off during those short moments

Finding the format the Comptroller General had in mind proved much more difficult than we first envisioned. Being good auditors, we first consulted the Office of Policy and the Assistant Comptroller General for Policy and Program Planning, then obtained some examples of reports issued by the Comptroller General's former firm and compared them with the style and format of traditional GAO "bluecover" reports. Next, by analyzing the Comptroller General's comments in the draft, we quickly discerned what concerned him: it was the report format itself. Of more concern than the substance were the charge paragraphs and the redundancy within the digest, opening statements, and chapter captions. Mr. Bowsher guestioned why we would state our conclusions before presenting the factual information, and he suggested writing an executive summary in lieu of a digest.

The definition of an executive summary proved somewhat elusive. Assistant Comptroller General John Heller provided some sound advice and comfort to the team by pointing out that we had the green light to experiment, and we should not be concerned with GAO Report Manual requirements for this particular job. Mr. Heller also suggested we give the report to two top-notch editors and let them, as independent writers, handle the executive summary. At the same time, Jim Morris, our mainstay in this reporting phase, tried his own hand at rewriting the digest into an executive summary.

On Thursday, 4 days after receiving the Comptroller General's feedback, John Heller and I met with Mr. Bowsher. Our purpose was to discuss his expectations and, to the extent possible, chart a course of action that would get the report to the committee within the desired timeframe. The meeting was very helpful and clarified some of the concerns Mr. Bowsher had. We resolved the major issues during the meeting and agreed that the writing experiment should proceed. We agreed that an executive summary should be in the Comptroller General's hands by the following Monday, leaving us 4

days to write and polish the summary.

By the due date, however, it was apparent that our alternate plan of having the editors rewrite the digest would not succeed. Time simply was not on our side. They had not worked on the audit and were unfamiliar with the subject matter, and it was difficult for them to summarize a lengthy report into a concise, easy-flowing, issue-oriented executive summary within the time allowed. Given additional time. I am convinced that we would have gotten some very productive input from these two sources; however, we were pushed against a deadline, and it was a "mission impossible" task that we had asked them to do. On the other hand, Jim Morris had been making progress, and Monday evening, before the Comptroller General left for a meeting in Chicago, we were able to get the revised executive summary to Mr. Bowsher's office.

On Wednesday, Mr. Bowsher called from Chicago to give us feedback on the rewriting. This probably was the second biggest anxiety point that we reached on this assignment. We really did not know what to expect, but we hoped for the best. Therefore, Mr. Bowsher's first words were quite a relief. He thought the executive summary read very well. He was particularly happy with the second part of the summary which dealt primarily with the recommendations. He still felt we could improve the first part by focusing more sharply on the issues and making the side captions more descriptive. During our discussion, we realized that the issues he liked best were those we had illustrated with a good example. I assured Mr. Bowsher that we would get the remainder of the report, as well as the executive summary, repitched along the lines we felt would be more acceptable to him.

The team quickly beefed up the executive summary and made appropriate changes to the report's style. The entire package was typed in final by Thursday evening, and again we hand-carried it to Mr. Bowsher's home so that he could review it upon his return from Chicago.

The next morning, Jim Morris, Don Horan, and I met with the Comptroller General to discuss the additional changes he might want. Although there were a few minor points to be cleared up, Mr. Bowsher was happy with the report and was pleased with what had been accomplished. At this stage, Jim Morris and I felt very relieved.

Mr. Bowsher asked us how we felt about the writing exercise and the new style. We assured him that we liked the format and were quite surprised at how easily it flowed. The recommendations, particularly, did not seem as awkwardly phrased as some in more stylized GAO versions. However, we raised one concern: the executive summary did not provide the reader with an easy cross-reference to the report section. This might present difficulties in getting from the executive summary to those sections in which the reader would be most interested. We suggested that a cross-reference to the pages, or at least the chapters, would be helpful. Mr. Bowsher agreed and had no objections to incorporating the cross-references.

During the remainder of that day, our secretarial staff made final corrections to the draft, and we met with Julius Brown, director of Administrative and Publishing Services. He agreed to give the report top printing priority once it was signed. We also arranged for hand-delivery of the copies to some 40 key staffers of congressional committees that had expressed interest in the report.

On Monday, the report package was delivered to Mr. Bowsher, and he signed it in the morning. Julius Brown then put all other printing work on hold and had our report printed the same day.²

A Satisfying Experience

We all recognize that this is not the normal routine we follow in writing GAO reports. However, it does demonstrate that, once GAO staffers chart a course. the task is never too big for imaginative people to do. Although we had some anxious moments, the writing was a lot of fun and one of the most memorable phases of this review. The entire task force felt very good about the exercise, and we were particularly pleased with the interaction and prompt feedback we received from the Comptroller General. In my opinion, this type of communication is one of the key elements in a satistying report-writing experience. All of us are anxious to please the boss and don't mind making changes when we know what is wanted and why.3

I hope your next report-writing effort will be as memorable for you as this one was for me.

²Report is available from GAO's Document Distribution Section, Room 1518, (202) 275-6241 Title "Defense Budget Increases How Well Are They Planned and Spent?" (PLRD – 82 – 62, Apr. 13, 1982)

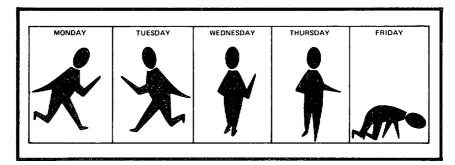
³This report is just one style GAO has tried; currently a Task Force on Report Processing is studying the changes GAO should consider in making its reports more readable.

A Week's Worth



Anne Rucker

Mrs Rucker is secretary to the director, Office of Congressional Relations She joined GAO in 1969 and has worked in OAS, AFMD, and most recently, PAD She has received several division awards for outstanding service and a Comptroller General's Meritorious Service Award



Monday

Monday seems like a slow day for me, at least for the first hour. Being a working mother and wife, I find myself working just as hard on weekends as on weekdays. Today I feel like "back to work again, and I didn't get any rest!" A cup of coffee gets me started.

In the Office of Congressional Relations (OCR), the telephone rings constantly with calls from congressional staff and from all GAO divisions and offices. The most frequent question that our secretarial and administrative staffs handle concerns the status of jobs requested by Congress. We also process numerous requests for copies of GAO reports. Some typical calls follow:

Senator Nickles' staff inquired about an article in The Washington Post. The Senator had read GAO's recommendations concerning a study of Nazi involvement in World War II and wanted to know if the Post had quoted GAO correctly. The first thing I thought was, "How am I going to find that article quickly and compare it with the report's recommendations while I put this caller on hold?" Instead of trying that, I offered to send him a copy of the report, but he said, "No, I wanted only to confirm the statement." And so, very professionally, I asked if he would give me the date of the article and I would get back to him with some answers. I tracked the article to a GGD report and asked the evaluatorin-charge to give the man a call.

Later in the day, I received a call from the Congressional Quarterly office to request payment of a bill for the Weekly Congressional Monitor, a document we use quite often in our office. This bill was paid sometime in 1981, according to GAO's Procurement Section. The Congressional Quarterly caller wanted a copy of the canceled check, front and back. I called Administrative Finance to request it and was referred to Procurement for a

purchase order. After several more phone calls, I decided to finish the matter the next day.

Another document-connected request came when Mr. Fitzgerald, OCR's director, asked me to get him the December 1979 issue of Fortune magazine. I called the Technical Library to order it but did not know for which week. Mr. Fitzgerald had assumed that Fortune was a monthly, but he did have a general idea about the article's subject. Thus, I ordered it by subject and went back to my administrative tasks. Right after that, Senator Sasser's office called for six copies of our report on the Clinch River Breeder Reactor. The Senate Veterans Affairs Committee office called for a copy of GAO's monthly list of reports issued in April and requested that they be added to our mailing list for it.

Tuesday

I will have to get busy right away this morning. I arrived at work about 7:15, and sure enough, Mr. Fitzgerald left four notes for me to call the divisions and follow up on a few outgoing congressionals. We usually have a staff meeting every Tuesday when all the legislative advisers get together to discuss congressional requests and other important issues. Each adviser is assigned certain congressional committees with which they coordinate GAO's work. Because Mr. Fitzgerald is in Denver giving a speech on 'Congressional Oversight: The Role of the General Accounting Office," at a conference sponsored by the Office of Personnel Management, we don't have our meeting today.

Getting right to my list of things to do, I called PLRD for a copy of a congressional contact memo confirming an agreement with Chairman Addabbo's staff to put a 10-day restriction on one of our reports. Division staffs prepare contact memos whenever they meet or talk with

congressional staffs to share important information. I found that there was no contact memo stating such an agreement, but an oral agreement had been made. I advised PLRD that they would have to call Chairman Addabbo's staff and document the agreement for the restriction before OCR could sign off on Form 115. the form which approves report distribution. Then I spoke with a group director in AFMD about another report. The report's transmittal letter stated that a copy was being provided to the Speaker of the House, yet this fact was not indicated on the Form 115. We took care of that with a handwritten insert on our separate copies of the Form 115.

Late in the day, Congresswoman Oakar's office called to ask if we had a recent GAO report on railroad retirement disability. Since that topic is handled by HRD, I called the Social Security Administration audit site in Baltimore to find out what they had done lately on this subject. As it turned out, an HRD associate director had testified on the subject the day before. Ms. Oakar's staffer was sure that a copy of the statement would be sufficient. I put a copy in the mail and felt good that so many matters were being resolved today.

One of my ongoing projects has involved writing a justification for OCR's 1983 administrative staff levels. Estimates of staff needs are due to the Office of Program Planning tomorrow, and Mr. Fitzgerald had asked if I would prepare that section of the memo. With so many telephone and written requests from the Hill. we need extra help in the administrative area. We also requested a temporary clerk-typist to assist the congressional correspondence assistant, who receives all our congressional mail, distributes it to the appropriate advisers, and reviews much of the final copy of our letters and reports to the Congress. I drafted my response and attached a copy of our recent workload statistics for Mr. Fitzgerald's review when he returns from Denver. Tomorrow, he'll find that on the top of his "to do" list.

Wednesday

Today starts out slowly, but I'm sure it will pick up. After a quiet evening at home with my husband, son, and daughter, I felt a little less rushed this morning. I start a list of things to do that were postponed by all those congressional calls. My first task was to ask Personnel to get an official personnel folder for one of our

employees. When I arrived at Personnel and introduced myself, I was surprised to learn that the receptionist there had never heard of our office. With so many sections within GAO, though, I'm sure it takes a while for newer employees to become familiar with all of them. So I took a few minutes to explain how OCR coordinates GAO's activities with the Congress. The receptionist then explained the official procedure I had to use to check out the folder I had requested.

Later in the morning, after more congressional calls, I met with a Procurement Branch staffer to find out whether the payment of the Weekly Congressional Monitor had ever been processed. We were still receiving billing letters for it, and there was no record of payment at the Quarterly office. Surely, if he could locate GAO's records, things would move right along!

By this time of the day, all the morning mail had been sorted among the legislative advisers. I decided to log in the congressional requests so that Mr. Fitzgerald could sign off on them. This morning I assigned seven cases, including one from Chairwoman Oakar requesting GAO to testify on the Pay Continuity Act and one from Chairman Ford asking GAO to examine the justification for one Federal agency's staffing and budget restrictions. For each of these I typed up a control case-activity record and prepared acknowledgement letters to each of the requesters. That took the rest of the afternoon because each letter needed two copies for our files and about seven to be distributed among the divisions, other interested parties, and GAO's Index and Files Section, whose staff creates a list of incoming congressional correspondence.

A nice relief from all the daily mail, phone calls, and administrative duties in our office is an occasional letter of thanks. In today's mail was a commendation from Senator Addabbo, Chairman of the Subcommittee on Defense. House Committee on Appropriations, thanking GAO for our assistance on reviews of Defense Department programs during the past year. Another commendation letter we received was from Representative Cardis Collins, Chairwoman of the Manpower and Housing Subcommittee of the House Committee on Government Operations. I recalled this one especially because it appeared in the GAO Management News and stressed how well GAO staff met tight deadlines to testify at hearings on the Railroad Retirement Board. Most of

these contacts cross my desk at one time or another, and a positive letter makes my job both interesting and rewarding.

liust received a call from Kim Barret in Congressman Marlenee's District Office. She stated that the congressman had written a letter to the Comptroller General in July, but he had not received any response from GAO. The letter concerned an allegation of fraud reported by an anonymous constituent. I told Ms. Barret that I would have to do some research and call her back. This really puzzled me because we always acknowledge a letter, either in writing or orally. It took me a while to get all the information together to call her back. The first thing I did was check the list for incoming congressionals. I then checked some other sources and discovered that, yes, we had received the letter, but we had sent our acknowledgement to the congressman's main office since the request did not state that it came from the District Office. I contacted Ms. Barret and explained the mixup.

As I hang up, I hear my boss dictating something. Unless it's a rush job, I'll let it wait until tomorrow. It's now time for me to leave for home, and believe me, today I welcome guitting time.

Thursday

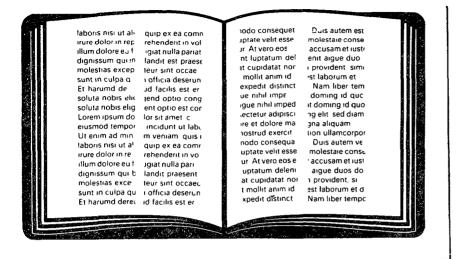
This is timecards day. Even though my vacation is just around the corner, I was very tempted to take annual leave today.

I started on the timecards around 8:00 a.m. so that I could turn them in by late afternoon. Although I have only 15 timecards to do, I know from experience that it takes time to get the legislative advisers to sign for leave taken. The advisers are usually on the Hill or doing business away from the office about half the time. Also, I know I'll have to leave the timecards to answer the telephone and do some quick research projects.

I received a call from a private firm asking if we had done any work related to a recent Mississippi River flood. Right after that, I received an inquiry from Senator Eagleton's staff about the status of a job he requested only a week ago. I'll never finish the timecards! I asked my coworker, Kim Bussey, to answer the phone if it rings again. We share the workload and often handle similar requests.

See WEEK, p. 50.

Bookmark



Auditing Performance in Government: Concepts and Cases.

By Richard E. Brown, Meredith C. Williams, and Thomas P. Gallagher. John Wiley & Sons, Inc., 1982.

Performance auditing has attained greater importance with the growth of government in the last two decades. During the 1960's and 1970's, both the number and dollar amounts of government programs increased substantially. Coupled with this growth are recent events of declining revenues, fiscal crises, and cutbacks in certain government programs. As a result, public officials, legislators, and private citizens are demanding greater accountability, asking not only whether government funds are handled properly but also whether programs are achieving their objectives. Government auditing has become an important element of this accountability function, especially for evaluating whether operations are conducted economically, efficiently, and effectively.

Not enough literature is available on government auditing. This book helps fill that void and is one of the first to offer guidance for reviewing the performance of the government manager. The authors define performance auditing as going beyond the scope of the traditional financial audit to include economy, efficiency, and effectiveness auditing. The book also

shows government managers and administrators the benefits of performance reviews in achieving program objectives and improving performance.

Using actual case materials taken from local, State, and Federal government programs, the book illustrates how to conduct successful, expanded scope audits and introduces key audit concepts. The major topics covered include the differences between expanded scope audits and traditional financial audits, results obtained from the expanded audit, the strengths and weaknesses of specialized auditing and analytical techniques, the management of the expanded audits, the auditor's relationship to the media and the client, and the implementation of recommendations of the expanded audit.

Cases based on real audits also illustrate how expanded scope audits are useful in helping government managers achieve public goals and objectives. Guidance for the manager, not usually emphasized in such publications, appears probably because of the authors' considerable background and experience. All three have done expanded scope auditing, and their vocations are diverse—one is in public administration and economics, another in law, and the third in accounting.

The book is divided into five parts. The first discusses the emergence of performance auditing and the limitations of financial auditing. The authors do not suggest that financial auditing is not needed but instead discuss what the financial audit, as well as the expanded scope audit, will

and will not provide. They point out that the financial audit's primary focus is to determine the fairness of and to render an opinion on the organization's financial statements. The financial review serves as the foundation for most government audit agencies. Expanded scope auditing, on the other hand, concentrates on how an organization's resources are used and determines whether the objectives established by the legislature or other authorizing body are being met. The authors recognize the Standards for Audit of Governmental Organizations, Programs, Activities and Functions (the "vellow book") issued by the Comptroller General as a landmark for government sector auditing.

Part two presents an overview of performance auditing (economy and efficiency and effectivenesss) and uses real case studies to demonstrate results. The authors point out that economy and efficiency auditing focuses on the relationship between resource inputs and product or service outputs. More specifically, this auditing examines the economy and efficiency with which the government entity acquires, manages, and uses resources.

The authors stress reviewing for economy and efficiency together since an entity could operate economically but inefficiently or efficiently but uneconomically. For example, an entity might acquire fuel oil to heat its buildings at a very attractive price but have such an inefficient system of internal controls that a large portion of the fuel is wasted or otherwise lost before it is used.

The book indicates that effectiveness auditing measures the value of the output of government services or the value of the results* of government actions. According to the authors, the beneficiaries of effectiveness auditing are the government entity itself, the recipient of the product or service, and society as a whole.

The third part of the book examines many specialized audit techniques and methodologies of performance auditing, including their advantages and disadvantages. Real case studies demonstrate the application of these techniques and methodologies and discuss their careful selection as a crucial responsibility of the auditor. The authors point out that with expanded scope auditing comes a responsibility to be fair, accurate, and complete; to maintain a high level of staff quality and training; and to use well-reasoned reporting.

The discussion in part four, managing the performance audit process, is again supplemented by a case study. In addition, the authors draw heavily on the Comptroller General's audit standards. This part also describes the unique relationships of the government sector auditor with the news media, special interest groups, and others.

In this part, the authors compare auditing in the public sector to walking a tightrope, with standards serving as the balancing rod. Standards will not prevent a fall but will make it less likely to occur.

One should remember, the authors suggest, that the auditor

- is not a detective or spy, nor a detector of fraud (although some now question the latter notion);
- cannot obtain needed data without client cooperation;
- must, by establishing good relationships and instilling confidence, persuade those audited to adopt needed changes;
- must be sensitive to the economic success of the client, regarding the audit as a cooperative venture with management;
- should not approach the client as an adversary.

The book's last part looks at three issues concerning performance audits. Are audit reports used and are their recommendations implemented? What factors influence utilization and to what degree can these factors be controlled? Is performance auditing cost effective? The authors had no definite answers because they felt that performance auditing is too new to judge. They asserted, however, that performance auditing will survive and ultimately thrive, thus fulfilling a crucial and logical role in public sector management. They nevertheless cautioned that the performance audit, requiring varied and nontraditional skills, is never likely to neatly fit the model of traditional financial auditing.

Easy to read, the book's use of actual cases makes its information very accessible. It should be useful to educators, students, and government managers and auditors. I would recommend the book to anyone interested in the economy, efficiency, and effectiveness of government operations.

W. A. Broadus, Jr. Accounting and Financial Management Division Government Oversight and Evaluability Assessment. By Joe Nay and Peggy Kay. Lexington Books, 1982.

When I started reading Oversight and Evaluability Assessment, I also began Robert Pirsig's pop philosophy classic, Zen and the Art of Motorcycle Maintenance (Bantam Books, 1974), I soon noted a common theme in these very different books. Pirsig recounts a motorcycle trip that ended abruptly when his motorcycle died during a torrential rain. Attributing the bike's failure to the rain, he methodically checked all rain-related problems. Finding nothing wrong, he unhappily hitchhiked home to return with a trailer and haul the motorcycle back. Only upon examining the motorcycle at home did he see that the gas tank was empty. The moral of the story: don't assume the basics; check them out.

In a rather different context, Joe Nay and Peggy Kay advocate evaluability assessment (EA) as the way to check the basics. After citing a home weatherization program in which the carpenter had to spend a large portion of his time filling out forms, they summarize EA's purpose. These EA procedures presuppose that government "must know what the problem being attacked is, how the problem can be handled, and how the suggested problem operates in practice not what someone thinks the problem is, claims will cure it, or how someone thinks the program is operating or intended to operate. If the carpenters are spending most of their time typing, it is a sure bet that the houses will not get weatherized, and it is silly to spend money to discover that the people in them are still cold" (p.

First developed in the early 1970's as an initial phase in large scale impact studies. EA can be an end in itself when one seeks to understand how a program operates. EA formalizes the process of learning about a program and comparing rhetoric with actual performance. The process includes a system to collect information, a series of modeling steps to organize and analyze the data, and a set of rules to decide when to stop or continue. Thus, EA involves (1) talking to personnel at various levels of authority, (2) learning program operations firsthand, (3) comparing these firsthand opinions with the statements of those in charge, and (4) assessing repeatedly the need for additional information.

Not surprisingly, this process sounds like many GAO assignments. Nay, in fact, has often consulted for GAO and praises the agency for practicing EA.

The book has four sections. While the first two sections give an overview of evaluation purposes and principles and explain formal models and measurement process through a simple example, the last two discuss EA's information sources and then elaborate on EA's model building approach.

Although the general EA approach is familiar to GAO, the modeling steps are less well known. The authors develop a series of models, whose first set, the testable models, comes from statements by those in charge. This set includes (1) a testable logic model, a series of if-then statements outlining the operations; and (2) a testable functional model, a flow and function diagram detailing program operations. The next model, the equivalency functional model, depicts the structures and flows of the operating system as observed by the evaluators.

The next step reconciles differences between the models based on statements of those in charge and the equivalency functional model of actual observation. If these differences prove irreconcilable, then the program is judged unevaluable. As Joe Nay said in an interview about the book, when expectations (the testable model) and reality (the equivalency model) are sharply different, GAO evaluators may have produced "a significant finding." If the models coincide, an evaluable model consisting of question and associated measures is developed as the foundation of the final evaluation design.

One should perhaps distinguish between EA as a philosophy and as a formal process. Philosophically, EA is a common sense way of uncovering a system's rhetoric, analyzing it in light of actual performance, and concluding from that data whether to stop or continue. The formal process incorporates the EA philosophy and emphasizes formalized modeling. Although properly developed models could undoubtedly minimize incorrect decisions, one pays a price. Training in the formal EA process ideally entails a year long apprenticeship with an EA specialist. The authors also tell about developing an equivalency diagram of the Baltimore criminal justice system that was 22 feet long and took four months to

See BOOKMARK, p. 50.

Judith Hatter

Small Business Innovation Development Act of 1982

Public Law 97 – 219, July 22, 1982, 96 Stat. 217, has as its purpose to strengthen the role of the small, innovative firms in federally funded research and development. The law also provides for utilization of Federal research and development as a base for technological innovation to meet agency needs and to contribute to the growth and strength of the Nation's economy.

Not more than 5 years after the enactment date, the Comptroller General is required to report to Congress on the implementation of, and nature of research conducted under this act.

Title 31, United States Code

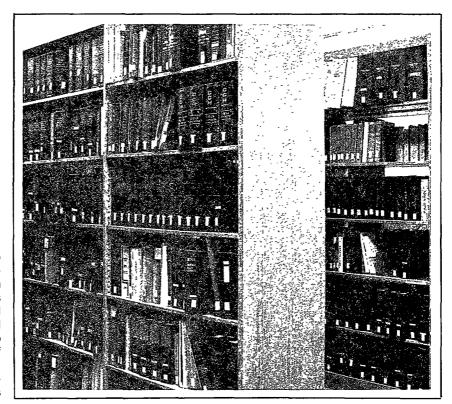
On August 9, under suspension of the rules, the House of Representatives passed H.R. 6128 to revise and codify Title 31 of the United States Code, "Money and Finance." This title contains laws relating to the functions and jurisdiction of the General Accounting Office.

Subsequently, on August 20, the Senate Judiciary Committee was discharged from further consideration of the legislation, and the bill passed the Senate. (Public Law 97 – 258, September 13, 1982)

Federal Audit Functions in the Territories

As the result of a March 25, 1982, GAO report on the functions of the United

Legislative Developments Developments



States Government Comptrollers in American Samoa, Guam, the Northern Mariana Islands, the Virgin Islands, and the Trust Territory of the Pacific Islands, Senator Lowell P. Weicker of Connecticut introduced GAO-drafted legislation, S. 2633. The legislation would implement the GAO report's recommendation to transfer audit authority and related staff of these government comptrollers' offices to the Office of Inspector General, Department of the Interior.

GAO Assessment of Unit Cost Growth Reports

The conference report on the DOD Authorization for fiscal year 1983 (H. Rept. No. 97 – 749) states that

conferees strongly believe the Comptroller General should be prepared to review and analyze DOD reports on unit cost growth in major defense acquisition programs promptly after these reports are submitted to the Congress. The con-

ferees recognize the importance of an independent assessment of the findings and conclusions contained in these unit cost reports. The Comptroller General can expect to receive direction from the Armed Services Committees of the Senate and the House of Representatives to provide the type of review, analysis and recommendations outlined in section 1138 of the Senate bill.

Data on Geographic Distribution of Federal Funds

On July 29, the Senate passed S. 2386 with an amendment in the nature of a substitute. The legislation would provide for the establishment of a system to collect data on the geographic distribution of Federal funds.

The legislation requires the Comptroller General, in consultation with the Con-

See Data, p. 51.

Reflections



Diane E. Grant

Since *The Staff Bulletin* stopped appearing in March 1960 and the *GAO Review* was not published until the winter of 1966, here is an interesting item taken from the 1963 November issue of the Watchdog:



GAO Tennis Champ: Frank T. Davis, freight rate assistant, Transportation Division, scored 16 wins and no defeats in the Government Departmental Tennis League in the past year. Mr. Davis has a won-loss record of 65-1 after 5 years of representing the GAO Employees Association. This graduate of Armstrong High was a four-letter man in baseball, football, track, and tennis.



Ten years ago, in the winter 1973 issue of the GAO Review and the winter editions of the Watchdog, you will find that:

- William J. Anderson, director, GGD, was designated assistant director in the General Government Division responsible for audit of operations of the U.S. Postal Service, effective Aug. 23, 1972.
- John D. Heller, Assistant Comptroller General, was designated as associate director in the Manpower and Welfare Division responsible for reviews of health activities operated and funded by the Federal Government, effective Aug. 20, 1972.
- Morton E. Henig, senior associate director, Human Resources Division, was designated an associate director in the Manpower and Welfare Division in the areas of education and manpower training, effective Aug. 20, 1972.
- Roger L. Sperry, group director, GGD, was designated legislative adviser in the Office of Legislative Liaison, effective October 15, 1972.
- Milton J. Socolar, special assistant to the Comptroller General, then deputy general counsel, spoke before American University law students on the functions of GAO and the Office of the General Counsel, September 14.

- Bill Thurman, Special Assistant to the Assistant Comptroller General for Operations, participated in workshops on implementation of the recently enacted revenue-sharing program, October 1972.
- A major study directed by the Comprehensive Health Manpower Training Act of 1971 was completed and issued on November 20, 1972, on health facilities construction costs.
- The Monthly List of GAO Reports was initiated as required by section 234 of the Legislative Reorganization Act of 1970. Each month, the Comptroller General will send to the Congress, its committees, and its Members a list of GAO reports issued or released during the previous month. This list will help committees and Members keep informed about GAO reports and will also serve as a ready reference to reports issued. Each list will show the title of the report. date of issuance, and file number and will identify the Government agencies or other organizations responsible for the activities reported on.

48

LOCATION, cont from p. 7

Third Annual Health Fair

"Health Yourself to Wellness" was the theme on October 26 and 27, 1982, when GAO's Health Unit sponsored over 20 organizations and activities to encourage health awareness. The groups presenting lectures or displays in GAO conference rooms and corridors included the American Cancer Society, the American Diabetes Association, the D.C. Lung Association, and the Podiatry Society of D.C. In addition, several mobile health vans, outside health clinics, and safety and fitness groups participated.

The Health Unit officially titled the Public Health Service Division of Federal Employee Occupation Health) invited all building employees from GAO and the Departments of Transportation and Labor to attend the free health seminars and exercise demonstrations. Interested staff could sign up for foot examinations or blood tests, obtain a computerized nutrition analysis and diet counseling, or donate old eyeglasses or contact lenses to the Lions Club.

Mrs. Mabel Bryant, R.N., this year's coordinator, noted that the third annual fair was the largest ever planned by the Health Unit. She encouraged *Review* readers to learn more about the unit's services by visiting it at any time in room 1455.

Management Development Center Moves

After 2 years in the Georgetown section of Washington, the Management Development Center (MDC) has moved to the seventh floor of the Judiciary Plaza Building, 450 5th Street, N.W.—across from the GAO Headquarters.

Since September 1980, the Office of Organization and Human Development's MDC has hosted more than 125 training courses in supervision, management, and leadership, as well as many divisional staff meetings, midpoint conferences, and other activities.

According to OOHD director Tom Franklin, the new MDC will provide four large classrooms and a new management library. The MDC staff includes Cindy Clark, Marty Herrin, Sande Lehrer, Janice Raynor, and Kathy Karlson, who also

coordinates the *Review*'s feature entitled "Manager's Corner."

Ed. Note: The Review would like to thank Laura Kopelson, editor of the GAO Management News, for her special assistance with the contents of this edition's "On Location" and "GAO Staff Changes."

TOPICS, cont. from p. 13.

Kidder, L.H. Research Methods in Social Relations, Fourth Edition. Holt Rinehart and Winston, 1981. An excellent and most readable introduction to design, measurement, and data analysis. The emphasis is on causal interpretations.

Pedhazur, E. J. Multiple Regression in Behavioral Research: Explanation and Prediction, Second Edition. Holt, Rinehart and Winston, 1982. A broad treatment of regression analysis, including analysis of variance, analyses of covariance, path analysis, and LISREL. An intermediate-level text.

U.S. General Accounting Office. Causal Analysis: A Method to Identify and Test Cause and Effect Relationships in Program Evaluations. U.S. General Accounting Office, 1982. An introduction to the analysis of causal relations by path analysis. Includes step-by-step procedures.

COINS, cont. from p. 15.

to the Olympic committees. Future U.S. Olympians came to Washington to lobby for enactment of the Senate-passed bill. Moreover, Olympic gold-medal winners. such as Wilma Rudolph, Donna de Varona, Bob Mathias, the Reverend Bob Richards, and John Naber, together with LAOOC and USOC officials, testified in favor of the Senate bill. The Administration backed the bill, and its promoters hired five lobbying organizations to push it. Even a Sports Illustrated article lambasted the House subcommittee chairman for stonewalling and concluded that, if the marketing consortium withdrew. "the Los Angeles Games could be in serious trouble."

House Floor Debate Makes Legislative History

Clark, Marty Herrin, Sande Lehrer, Janice | Finally, the House subcommittee acted. Raynor, and Kathy Karlson, who also | But despite intense lobbying for the Sen-

ate bill, the subcommittee chairman's bill was unanimously reported out of the subcommittee.

When the bill reached the full committee, it was soundly defeated by a 32-to-7 vote. This meant that House passage of the Senate bill was almost assured. However, 5 hours of emotional debate before the Committee of the Whole House produced the unexpected.

The applicable House resolution read like an old Washington Star "Gobbledygook" column. It permitted consideration of (1) an amendment in the nature of a substitute recommended by the Committee on Banking, Finance and Urban Affairs printed in the Senate bill as an original bill for the purpose of amendment, (2) an amendment to the said substitute offered by the committee chairman, and (3) an amendment in the nature of a substitute to said substitute offered by the subcommittee chairman. Commenting on this anomalous procedure, the subcommittee's ranking minority member said, "We are doing something differently than we have ever done before. We are debating two pieces of legislation."

And debate they did. Noting Occidental Petroleum's involvement in the marketing consortium, the subcommittee chairman referred to the Senate bill as the "Occidental Relief Act." The Olympic committees were accused of having their minds "brainwashed with financial Gatorade," and Occidental's chairman was likened to Goldfinger poised to hit Fort Knox for \$260 million in gold and silver. Not to be outdone, a proponent for the Senate bill observed that, "If you've got the facts, you pound the facts. If you've got the law, you pound the law. If you don't have either, you pound the table." He reported hearing a great deal of table pounding "in utter disregard of the facts."

In the end, the House passed the subcommittee chairman's bill by a vote of 302 to 84. GAO testimony substantially contributed to this strong vote: GAO was cited 13 times, and our testimony and congressional letters were quoted verbatim and excerpted for the *Congressional Record*. Even during the debate, one congressman asked our help in solidifying and clarifying his view, which he later expounded to his colleagues.

Passage of the House bill brought some surprising changes. Subsequent hearings before the Senate Committee on Banking, Housing and Urban Affairs found the Treasurer of the United States as

See COINS, p. 50.

COINS, cont from p. 49.

well as LAOOC and USOC officials supporting the Treasury-run program.

At those hearings, we addressed problems associated with past Treasury-run coinage programs as well as factors, which, if combined into marketing strategy, could stimulate public demand. The House-passed bill resolved many of these factors, and Treasury's marketing and merchandising proposal should provide an economical, accessible, and simplified channel of distribution.

On July 1, 1982, the Senate concurred with the House bill. On July 22, 1982, the Olympic Commemorative Coin Act, Public Law 97 – 220, was signed by the President. So if you should feel an outpouring of patriotism and pride as the 1984 Summer Olympic Games approach and want to help finance the Games and U.S. amateur athletics, don't hesitate to buy a coin. The LAOOC and the USOC will split \$10 for every silver coin and \$50 for every gold coin sold. Just remember—they're not tax deductible.

ELDERLY, cont. from p. 29.

make the regular trip. Some operators admitted that the advance registration requirement may be misleading because, if a system is heavily used, riders may have to schedule reservations far in advance to make sure they can get service.

Service priority. Some systems provide service on a first-come, first-served basis. Others prioritize service by trip purpose when they have more requests than they can handle. Of the services that did prioritize service, most gave highest priority to medical trips.

Cost of service to users. Both regular transit and paratransit services are federally subsidized. Most systems have not established criteria on what portion of the costs should be borne by the user. This area will receive more attention in the future as Federal operating subsidies are further reduced. While our survev did not explore the issue of cost. some operators mentioned it. They are examining whether comparable fares means the transit and paratransit user should pay the same fare (as they currently do in some areas) or whether they should pay a comparable portion of the cost of the service (which would mean a significantly higher cost for the paratransit

Comparability of service. We gathered information on whether the paratransit service was comparable to the

regular transit service in terms of the days of the week and number of hours a day it was available and the geographic area it served. While the information showed that the paratransit services generally operated fewer hours a day than the transit services, they usually provided service on as many or more days a week and covered the same or a larger geographic area. We found, however, that each service would have to be examined in more depth to get a clearer picture of its adequacy. For example, a bus system may operate a skeleton service on certain key routes between midnight and 6 a.m. It would, therefore, show that paratransit was operated fewer hours per day than the transit, but it would not show whether anyone needed paratransit during those periods when it was unavail-

Most systems operating paratransit systems indicated that they had made no changes in their service since the regulations were changed, and few changes were planned in the next year. A number of systems, however, indicated uncertainty about the future because of budget cutbacks. Some indicated that, with the phasing out of Federal subsidies, paratransit services would have to take its share of cuts. To control costs, they may have to tighten eligibility requirements or reduce service levels.

Many of the questions asked at the beginning of this article remain unanswered. The rights of the elderly and handicapped for basic transportation services have been acknowledged, but DOT has stepped back from the issue and decided that each local community must decide exactly how these needs will be addressed. There are no minimum levels that must be provided or any deadlines for when the programs will be in place. The adequacy of today's services for the elderly and handicapped depends on

- what "adequate" means to you because there is no agreement on what they should be,
- what community you are from—the services vary widely from one to another, and
- whether you accept the proposition (and many handicapped people do not) that specialized services can be comparable to accessible regular transit service.

The most effective method of providing transportation for the elderly and handicapped would be a fully accessible transit system supplemented by specialized services for those individuals who cannot

use the regular transit service. However, in these days of tight budgets, this is unlikely.

There has been progress in improving services to the elderly and handicapped since the 1970 legislation, but most cities do not yet offer either fully accessible regular transit or comparable specialized service. The issue is still controversial, and it remains to be seen whether further progress will be made under the current administration's policies and today's economic conditions.

SHADOW, cont. from p. 31.

These revisions principally consist of an evolving refinement of the differentiation between shadowing as an assignment versus shadowing as an activity—over time, more emphasis has been placed on shadowing as an activity within a broader scoped assignment.

In terms of my developmental plan, this assignment exceeded my expectations, and I certainly will remember it as a, if not the, highlight in my career.

Many members of the Far East Branch contributed to this article. We are grateful for their enthusiastic cooperation

BOOKMARK, cont from p. 46.

create. The procedure fails, of course, when formal modeling exceeds what the evaluation requires.

What does Government Oversight and Evaluability Assessment offer GAO evaluators? First, it reminds us of the basics: talk to those in charge, see for yourself, and compare. Second, although the formal modeling approach may not be readily adoptable or desirable for GAO work, its principles and its simpler forms and applications may help organize information in many GAO evaluation situations. Written with style and wit, this book presupposes no formal training in statistics, modeling or policy analysis.

Laurie E. Ekstrand Institute for Program Evaluation

WEEK, cont. from p. 44.

After doing about half the timecards, I realized we had a holiday this pay period. I had to go back and make corrections. They were finally done at about the time Mr. Hagenstad returned from a meeting

cont.next column

on the Hill to say he is canceling his leave tomorrow. Two other people called in sick, but they decided to come in at 11:00 a.m. With all the white-out I use on timecard corrections, I suppose I could paint a small wall.

The schedule of future congressional hearings must be typed by 3:00 p.m. every Thursday. I got the list back only yesterday, so I must type it quickly and distribute the copies.

Mr. Socolar's office called to say that he cannot meet with the OCR advisors until 3:30 this afternoon. I notify the advisers of the change, then catch up on the filing until it is time to go home.

Friday

I arrived at the office around 7 a.m., a little early this morning because the traffic was extremely light. A lot of people must be flexing or on leave. Right away, I received a few calls from divisions to confirm that the weekly OCR meeting will take place.

Around 7:30, the Budget Office called to say that Mr. Socolar had approved OCR's request for an exception to the hiring freeze. My work on that request memo paid off. This will allow us to convert Kim to permanent status (she has been temporary since September) and will allow Mr. Griffith to advertise for a secretary. Immediately went downstairs, picked up a few copies of the exception memo, and dropped by Personnel to give our team representative a copy. Next, I typed up the request forms so we could get a vacancy announcement on the board as quickly as possible.

Later in the day, Personnel called me to ask if we could interview a young lady for a clerk-typist position. Barbara Scott and I interviewed her and were very impressed, especially when we discovered she had worked in Congressional Affairs at the Department of Energy. Mr. Fitzgerald is not available to interview her today, so he will meet with her one day next week.

I then received several calls from congressional staffers seeking copies of GAO reports. One caller requested a copy of a report that GAO did on the International Trade Commission. We often received calls for reports with a report name, report number, report date, etc.; I refer them to our research assistant, who can easily find the report and forward it to the requester. But this time, the research assistant asked me for more information because several reports mention the Inter-

national Trade Commission. I called back and told the requester that we needed more information before we could research his report.

Why did I ever call him back? Immediately he said, "Now let me get this straight. You all did the report, and you are calling me for more information?" I was never more shocked since coming to work at GAO. This man literally cursed out both me and the agency. I let him finish and then, very calmly, asked him again if he could tell me a little more about the report. He put me on hold, did a little research himself, got back on the phone and gave me the subject as well as the report number, stating that he needed 20 copies right away. He said he would appreciate it if we would be a little more prompt in sending out our reports. Then he asked me again for my name and told me he would be looking for his reports the next day, and if he didn't get them, he would be calling me back. I told him it was guite all right to call me back tomorrow and any other time he would like a copy of a report. It's a call like this one that gives meaning to the term "TGIF." We often receive calls from congressional staffers who need copies of reports right away, sometimes in the next 15 minutes. I have found that if you are very courteous and tactful when you receive these calls, even the irate ones, you can come to some type of agreement.

My husband, who usually picks me up from work, just called to say that he would be working late and would not be able to pick me up until around 7:00 tonight. It is Friday, and of all days, I don't like to stay late. Shirley Graham in the Information Office doesn't live very far from me, so I asked if she would give me a ride. Shirley agreed, but we both ended up working until after 5:30 before we could leave for home!

DATA, cont. from p. 47.

gressional Budget Office and the Census Bureau, to conduct an annual study to determine that

- (1) data sources used to compile the required reports are consolidated in a consistent manner without overlap; there is comprehensive coverage of the types of expenditures specified; and data set forth in the reports are accurate;
- (2) definitions of cities or other entities of local government employed to produce the reports are adequate;
 - (3) there is adequacy of other such I

requirements and procedures considered appropriate by the Comptroller General.

Claims Collection

On August 16, Senator Henry Jackson of Washington introduced S. 2842, a bill which has been recommended to the Congress by the General Accounting Office which would authorize agency heads to grant equitable waivers in the compromise and collection of Federal claims involving inadvertent overpayments of travel and transportation expenses. Current law permits agency heads to waive claims for overpayments involving pay and allowances. My bill would simply expand that authority to include waivers for travel and transportation expenses.

My bill would also increase the amount of claims which could be waived from the existing level of no more than \$500 per claim to no more than \$5,000 per claim.* * *1

Immigration Reform

On August 17, the Senate passed S. 2222, the Immigration Reform and Control Act of 1982.

The bill provides for a report by the Comptroller General on the results of a comprehensive review of the implementation and enforcement of the provisions concerning control of unlawful employment of aliens.

Refugee Assistance Amendments of 1982

The House-passed version of H.R. 5879, to extend the refugee assistance authorization for 3 years, includes a provision for annual audit by the Comptroller General of funds expended for grants and contracts incident to the initial resettlement program.

State Justice Institute Act of 1982

On August 10, S. 537, to establish the State Justice Institute, was amended and passed by the Senate. The bill provides for GAO to audit and report to the Congress on the operations of the Institute.

¹Cong Rec Vol 128, (Aug 16, 1982), p S10591

GAO Staff Changes

In late September, Comptroller General Bowsher announced several changes within GAO designed to build a more cohesive organization.

Mr. Bowsher has decided to expand the Office of the Comptroller General to include two new positions to better focus the planning and reporting of GAO's work and to manage its operations:

Henry Eschwege, formerly the director of the Community and Economic Development Division, has been named the Assistant Comptroller General for Planning and Reporting. He will be responsible for determining the overall direction of GAO's work and for the quality of reports on specific assignments. This will include developing strategic and operational issue area plans, assuring the quality of GAO's products, and determining the usefulness of GAO's work to the Congress.

Frank Fee, former director of the Field Operations Division, will be Assistant Comptroller General for Operations, responsible for the day-to-day management of GAO's technical and administrative activities. This will include special emphasis on the continued development of a partnership between the Washington divisions and regional offices; the assignment and utilization of staff, especially key staff in issue areas; assessment of GAO's organization; and the implementation of GAO policies and procedures.

These two new offices, in conjunction with the Special Assistant to the Comptroller General (Milton Socolar) and Mr. Bowsher, will provide a single focus for coordinating and directing the entire GAO organization.

The other Assistant Comptrollers General will advise and guide the Comptroller General in specific areas:

Greg Ahart, as Assistant Comptroller General for Human Resources, will lead GAO's efforts to develop its human resources and will manage Personnel, the Office of Organization and Human Development, and the Personnel Systems Development Project.

John Heller, Assistant Comptroller General for Policy, will remain in charge of policy, emphasizing the continued development of policy guidelines and a new major effort regarding post-review of policy implementation. He will still be responsible for the Office of Foreign Visitors and International Audit Organization Liaison.

Greg Ahart, as Assistant Comptroller General for Human Resources, will lead GAO's efforts to develop its human resources and will manage Personnel, the Office of Organization and Human Development, and the Personnel Systems Development Project.

John Heller, Assistant Comptroller General for Policy, will remain in charge of policy, emphasizing the continued development of policy guidelines and a new major effort regarding post-review of policy implementation. He will still be responsible for the Office of Foreign Visitors and International Audit Organization Liaison.

Harry Havens, Assistant Comptroller General for Program Evaluation, will continue to guide program evaluation and assist the Comptroller General on Special projects.

In addition, Mr. Bowsher announced that he was merging the Energy and Minerals Division with the Community and Economic Development Division to create a new Resources, Community, and Economic Development Division, under the direction of Dexter Peach.

Harry Havens, Assistant Comptroller General for Program Evaluation, will continue to guide program evaluation and assist the Comptroller General on Special projects.

In addition, Mr. Bowsher announced that he was merging the Energy and Minerals Division with the Community and Economic Development Division to create a new Resources, Community, and Economic Development Division, under the direction of Dexter Peach.

"This change will improve the integration of program and assignment planning for closely related issue areas of both former divisions, such as energy, materials, environment, land use and water, while continuing our work in food, housing, transportation, and economic development," Mr. Bowsher explained.

"This change will improve the integration of program and assignment planning for closely related issue areas of both former divisions, such as energy, materials, environment, land use and water, while continuing our work in food, housing, transportation, and economic development," Mr. Bowsher explained.







GAO's Assistant Comptrollers General

Henry Eschwege

Henry Eschwege was formerly the director of the Community and Economic Development Division.

Mr. Eschwege joined GAO in 1956 after serving 7 years on the staff of a certified public accounting firm in New York City. He received a B.S. degree in accounting, magna cumlaude, from New York University, and completed the Program for Management Development, Harvard Business School. Mr. Eschwege is a CPA (New York) and a member of the New York State Society of Certified Public Accountants and the National Association of Accountants.

Since coming to GAO, Mr. Eschwege has served in numerous supervisory positions and was appointed director of the Resources and Economic Development Division upon its creation in 1972. He has received numerous awards for his outstanding contributions to GAO. He received the GAO Meritorious Service Award in 1965 and 1967, the GAO Distinguished Service Award in 1968, the Comptroller General's Award in 1977 and 1978, and GAO's Distinguished Executive Award in 1981.

Francis X. Fee

Francis X. Fee, formerly the director. Field Operations Division, joined GAO in 1963 after graduating from Villanova University with a B.S. degree in economics. From then until 1972, he performed a variety of assignments in the former Civil and Resources and Economic Development Divisions. In 1972, he was selected to participate in the President's Executive Interchange Program, working a full year with the American Telephone and Telegraph Company in New York City. In 1973, he was promoted to assistant regional manager in the Philadelphia Regional Office and, in 1975, he was appointed regional manager of New York. He was appointed director, FOD, in 1979.

Mr. Fee has received numerous awards for his outstanding contributions. He received the Career Development Award in 1972, a Special Education Award in 1973, and the Distinguished Service Award in 1978. In February 1981, he was p!resented GAO's Meritorious Executive Award.

J. Dexter Peach

J. Dexter Peach, who formerly served as the director, Energy and Minerals Division, joined GAO in 1960. Mr. Peach has been involved in the audit and analysis of numerous Federal programs with emphasis on agriculture and natural resource activities. He also has been heavily involved in the planning and reporting of all GAO's energy-related efforts.

Mr. Peach has received numerous awards in recognition of his outstanding contributions: GAO's Career Development Award in 1969; GAO's Distinguished Service Award in 1976 for his pioneering accomplishments in planning GAO's energy work and his significant contribution to improving Federal energy programs; an SES bonus for outstanding performance in 1980; and in 1982, the Comptroller General's Award for his work in, and contributions to, Federal energy-related programs.

Mr. Peach holds a B.S. degree in business administration from the University of South Carolina (1960) and an M.S. degree in administration from George Washington University (1973). He completed the Program for Management Development at Harvard Business School in 1972. He is a CPA (Virginia) and a member of the American Institute of CPA's and the National Association of Accountants.

Additional Staff Changes

SUPERVISORY GAO EVALUATOR

Accounting and Financial Management Division

Roger McDonald

Community and Economic Development Division

Donato Soranno

James Wells

Energy and Minerals Division

Clifford Gardner

William Kruvant

Field Operations Division

Thomas J. Brew (Washington Regional Office)

Gilbert Bowers (Denver)

Victor Ell (Los Angeles)

James Meissner (Cincinnati)

Kenneth Pritchett (Dallas)

Louis Rodrigues (Philadelphia)

General Government Division

Gene L. Dodaro

Mark E. Gebicke

International Division

Neal Curtin

John Payne (Honolulu)

William Ludwig

Program Analysis Division

Emilie G. Heller

Brad H. Hathaway

Procurement, Logistics and Readiness Division

Foy Wicker

Office of Organization and Human Development

A. R. Shanefelter, Jr.

ATTORNEY-ADVISER

Office of the General Counsel

Ernie E. Jackson

Gary L. Kepplinger

SUPERVISORY COMPUTER SPECIALIST

Accounting and Financial Management Division

Maurice Moortgat

SYSTEMS ACCOUNTANT

Accounting and Financial Management Division

Bruce Michelson

SUPERVISORY OPERATIONS RESEARCH ANALYST

Accounting and Financial Management Division

Samuel Oliver

Institute for Program Evaluation

D. Allen Rodgers

SUPERVISORY ECONOMIST

Program Analysis Division

Geraldine Gerardi

RETTREMENTS

Linwood Adams Theodore Banka

Ernest Davenport Robert Sawyer Typewriter Repairman

GAO Evaluator

Supervisory GAO Auditor Senior Evaluator OAPS

MASAD AFMD

Seattle

NEW STAFF MEMBERS ____

The following new staff members reported for work during the period July 1, 1982, through September 5, 1982.

Office of the Comptroller General	Frazier, Sarah	Birch and Davis Associates, Inc.
Office of Information Systems and Services	Boyer, Larry M.	Library of Congress
Office of Financial Management	Sutler, Mary B.	Waldenbooks
Office of Administrative and Publishing Services	Jasper, Anthony	United Research and Development Corp.
Community and Economic Development Division	Petitt, Michele	Dept. of Commerce
General Government Division	Stevens, L. Nye	OMB
Federal Personnel and Compensation Division	McNaught, William	ICF, Inc.
Institute for Program Evaluation	Datta, Lois E.	National Institute for Education
Human Resources Division	Poindexter, George	National Consumer Cooperative Bank
Program Analysis Division	Heller, Emilie G.	Dept. of Labor
	Hathaway, Brad H.	House Committee on Appropriations
REGIONAL OFFICES		
Denver	Williams, Patsy	Dept. of Energy
Los Angeles	Machen, Mack M.	Del Green and Associates, Inc.
Philadelphia	Jones, Beverly	Dept. of Commerce
	Zambelli, Anna	Union Central Life Insurance
ATTRITIONS		
Division	Name	To
Community and Economic Development Division	Barry Florence	Bell Systems Corp.
Energy and Minerals Division	Stephanie Herbert	C & P Telephone
Energy and Minerals Division	Martin Libicki	Dept of the Navy
General Government Division	Jill N. Delfin	Not specified

GAO Review/Winter 1983

Own business

Private industry

School

School

School

IRS

R. Kent Tyler

Adele Bomysoad

Loucious R. McKenzie

Leslie R. Melhuish

Dorothy A. Schmidt

Gregory Boykin

Human Resources Division

International Division

James R. Hamilton

International

Monetary Fund

Karen K. Levin

Charles T. Matz

Charles T. Metz Dept. of State Frederick Resnick Private industry

Frank Zappacosta Organization of American States

Personnel Alice Hajjar Dept. of the Treasury

Renee Keck Not specified

Maire Kliefoth Dept. of the Air Force

Program Analysis Division Lawrence P. Brunner Central Michigan University

Gwendolyn B. Moore The Case Study Institute, Inc.

Atlanta Daniel Bailey Air Force Audit Agency

Laurence Blose School

Hugh Weeks Dept. of Defense

Boston Barbara Abbott School Helen Franklin Not specified

Diane Martin School
Richard Tyler EPA

Chicago Pam Larson Private accounting firm

Cincinnati John Adams School

Thomas Bachman

Lucion Dobbs

Corps of Engineers

Harold Fine

Dept. of Energy

Air Force Audit Agency

Air Force Audit Agency

Ervey Henderson Air Force Audit Agency

Warren Lee Defense Contract Audit Agency

Dallas James Mikelson Not specified

Denver Kathryn Amos Dept. of the Interior

Connie Bartram
Gay Hopkins
Gary Johnson
John Kunzler
John Russo
Nikki Tinsley
Louis Williams

Private industry
Dept. of the Interior
Dept of the Interior
Dept. of the Interior
Dept. of the Interior
Not specified

Kansas City JoAnn Bowman School

Lynette Hicks Private industry

Pat Lipovitz Home Mary Miller Home

William White Private industry

Los Angeles Jimmy Bowden Air Force Audit Agency

Svetlana Darche Home

Kenneth Dobbs Air Force Audit Agency

John Garbett CBS
Diane Hall School

Debra Robinson-Jacobs Private industry Nancy Schneider So. Calif. Gas Co.

Julie Seidman Home

Kenneth Stone City of Anaheim

New York Michelle Lynch Private industry
Alfred Pleasure Not specified

Philadelphia	Jeanmarie Emhof	Ноте
San Francisco	Carol Kasparek	Not specified
Seattle	Raymond Chapman David Cram Cynthia Peterson Julita Gabay	Foster & Marshall Investment Co. Wycliffe Bible Translators Blue Cross Not specified
Washington	Cheryl-Anne Eskey Edward Holton Ivy Jenkins Michael McPoland Betty J. Woodard	IRS Not specified Not specified U.S. Courts Not specified

Professional Activities

Office of the Comptroller General

Harry S. Havens, Assistant Comptroller General, spoke at the monthly luncheon meeting of the American Society of Military Comptrollers Association. His topic was "Budget Reform." The meeting was held at the Ft. Myer Officers Club, Washington.

John D. Heller, Assistant Comptroller General for Policy, addressed the following groups:

OPM Executive Seminar on Public Program Management on "Executive Competence: A Panel Discussion," Kings Point, NY, June 17 and Sept. 23.

Washington Seminar on Politics and Education on the "Role of the General Accounting Office in the Federal Government," Washington, June 25.

Washington Semester Program of the American University on "The Role of the General Accounting Office in the Federal Government," Washington, Sept. 20.

Elaine L. Orr, director, Office of Foreign Visitor and International Audit Organization Liaison, addressed the Harvard Institute for International Development on "Control of Government Corporations—In the U.S. and Other Countries," in Cambridge, MA, Aug. 16.

Office of Internal Review

Jane E. Altenhofen, evaluator, was awarded a master's degree in public administration by the American University School of Government and Public Administration in August 1982. She was also invited to join Pi Alpha Alpha, a national honor fraternity for public affairs students in the top 20 percent of their class

Office of the General Counsel

Rollee Efros, associate general counsel, spoke on the "The Budget Process and Attempts at Reform" at the annual meeting of the American Bar Association, Public Contract Section, held in San Francisco, Aug. 6-12.

Seymour Efros, associate general counsel, moderated the Government Contracts Seminar at the FBA Convention in Crystal City, VA, Sept. 9.

Richard Kasdan, seniorattorney, spoke on "The Oversight Role of the General Accounting Office" at a University of Washington Law School continuing legal education program on the Pacific Northwest Electric Power Planning and Conservation Act in Seattle, June 5.

Accounting and Financial Management Division

Walter L. Anderson, senior associate director, was given an award for "Supreme Achievement in ADP Excellence" for a series of GAO reports addressing Government-wide problems in ADP by the Interagency Committee on ADP at a ceremony held at Bolling AFB, Washington, June 15.

Ronald J. Points, associate director:

Spoke on the Governmental Accounting Standards Board and received the AGA Distinguished Leadership Award at the Association of Government Accountants annual meeting in Denver, June 16.

Spoke on OMB Circular A-123 and Internal Controls before the Nebraska Society of CPAs Municipal Auditing Conference in Omaha, June 22.

Spoke on the purpose and scope of the Governmental Accounting Standards Board before the NY/NJ and Mid-Atlantic Intergovernmental Audit Forums, June 24.

George Egan, associate director, spoke on "Current Efforts in Prevention and Detection of Fraud, Waste, and Abuse—Federal Departments and Agencies," before the CPAs in Government conference, San Antonio, June 17.

Virginia B. Robinson, associate director:

Spoke on "Update on the GAO Accounting System Approval Process" at the Financial Management Institute in Dallas, Aug. 17.

Mrs. Robinson and **Joseph J. Donlon**, senior group director, spoke on "Reflec-

tions on the New GAO Process for Approving Accounting Systems" at the Association of Government Accountants Professional Development Conference in Denver, June 15. Mr. Donlon has also been appointed Chairman of the Association of Government Accountants National Education Board.

W. A. Broadus, Jr., group director:

Conducted briefings and workshops on governmental audit standards and governmental auditing to the following organizations: Georgia State Audit Staff, Atlanta; State and Federal Financial Management and Audit Conference, sponsored by the Pennsylvania Department of Transportation and the Federal Highway Administration, Taminent; Annual Conference of the Association of Government Accountants, Denver; Montana State Audit Staff, Helena; International Conference of Institute of Internal Auditors, Washington, DC; U.S. Department of Commerce Inspector General Audit Staff, Washington, DC; annual meeting of the American Accounting Association, San Diego.

Was reappointed to serve on the AICPA Auditing Standards Advisory Council, AICPA MAS standards Practice Subcommittee, and AACSB Accounting Accreditation Committee.

Carl R. Palmer, group director:

Was elected to the Executive Board of the Interagency ADP Committee for 1982-84.

Participated in a panel on Defense Computer Acquisition at the National Computer Graphics Association meeting held in Los Angeles, June 16.

Gave the keynote address, "Congressional and Audit Interests in Computer Performance Management," at the 1982 USAF Computer Performance Management Conference, in Montgomery, AL, June. 2.

George P. Sotos, group director, held a seminar on "Computer Resource Planning" for the Great Lakes Inter-Governmental ADP Council in Chicago, June 15.

Morey J. Chick, evaluator, spoke on information management before the "Mid Atlantic Government Information Council" in Philadelphia, PA, June 4. Mr. Chick also discussed a recently issued staff study on the impact of

automation on U.S. employment before the Council. Mr. Chick is a charter member of the Council.

Joseph L. Boyd, senior group director:

Spoke on "Auditing in a Computer Environment" at the June meeting of Central Pennsylvania's Data Processing Management Association (DPMA) in Harrisburg, June 17.

Mr. Boyd and Roger McDonald, senior ADP auditor, presented a one-day seminar on "Evaluating Internal Controls in Computer Based Systems" to the Central Kentucky Chapter of the Association of Government Accountants, Frankfort, June 10.

Robert A. Pewanick, group director, took office as President of the Washington Chapter of the Association of Government Accountants (AGA). He is also a member of the National Finance Committee, AGA.

Gordon J. Filler, senior accountant, was elected Secretary of the Baltimore chapter of the Association of Government Accountants.

Paul S. Benoit, computer specialist, is serving as Secretary Membership Chairman and Chapter Newsletter Editor, The Patuxent Chapter, Association for Systems Management, 1982-83.

Ronald Kozura, computer specialist, a member of the Washington Chapter of the Association for Systems Management, was elected Division Council Chairperson by representatives of the six chapters in the Chesapeake Division.

Jerry F. Wilburn, credit and collection systems analyst, gave a presentation on current legislative and administrative initiatives regarding Federal debt collection efforts before the Pennsylvania/New Jersey Collectors Association in Atlantic City, June 4.

J. Chris Farley, management analyst, gave a presentation on debt collection issues before the Department of the Treasury's Regulations and Compliance Staff's Liaison Branch in Washington, June 23.

Daniel G. Dietz, management analyst, gave a presentation on "GAO's Role in the Debt Collection Process" to the Department of Justice's Executive Office for U.S. Attorneys Debt Collection Conference, Washington, June 22

Joint Financial Management Improvement Program

Susumu Uyeda, executive director:

Moderated a workshop for the George Mason University Conference on Circular A-123 in Washington, June 21.

Gave a presentation on JFMIP's functions and its property management projects to the National Property Management Association in Washington, June 30.

Gave the keynote address on "Emerging Issues in Government Financial Management" at the National Institute for Management Research Conference on Financial Information Systems in Washington, July 28.

Spoke on "Changes in the Management Approach to Government Programs" at the 35th Annual National Conference of the State Human Services Finance Officers, Cherry Hill, NJ, Aug. 16.

Doris Chew, assistant executive director, moderated a panel discussion on "Productivity Improvements in Accounting and Finance Offices," and spoke on "Productivity Measurement Systems," at OPM's Southwest Region's Financial Management Institute in Dallas, Aug. 18.

James Rothwell, project director, spoke on JFMIP's Grant Cash Management Study in the States, at the 35th Annual National Conference of the State Human Services Finance Officers, Cherry Hill, NJ, Aug. 17.

Community and Economic Development Division

Henry Eschwege, director, discussed "The Functions and Activities of the General Accounting Office," before the Brookings Institution's Conference for Business Executives, Washington, June 7.

Andy Pasden, evaluator, discussed "Water Issues Facing the Nation," before the U.S. Chamber of Commerce's Committee on Natural Resources, Washington, June 23.

Dennis Fricke, evaluator, discussed "Factors Affecting Commer-

cial Bank Lending to Small Business," before a Blue Ribbon Committee on Small Business Capital Access, in Rosslyn, VA, July 7.

Dave Jones, issue area planning director, and Vic Rezendes, group director, discussed "Environmental Issues in the '80s," before the Environmental Task Force of Women in Government, Washington, July 23.

Roy Kirk, senior group director, and Phil Olson, evaluator, were interviewed on Federal land acquisition practices in Ohio's Cuyahoga Valley by Dave Jury of Valley Filmworks, which is producing a documentary to be aired on public broadcasting this fall.

Keith Fultz, senior group director, and Sherrie Russ, evaluator, were interviewed by Joe Harrison of the Berns News Bureau on GAO's report, "Congressional Decision Needed on Necessity of Federal Wool Program" (GAO/CED – 82 – 86, Aug. 2, 1982). The interview was broadcast on radio stations in the Midwest.

Human Resources Division

John W. Lainhart, group director:

Was elected Administrative Vice President of the EDP Auditors Associations, Inc., and EDP Auditors Foundation, Inc., for 1982-83.

Spoke at the Central Maryland Chapter, EDP Auditors Association meeting on "Risk Assessment and Systems Reviews" in Baltimore, Apr. 14.

International Division

Frank Conahan, director, as U.S. representative and Chairman of the Board of External Auditors, Organization of American States, presided at the Board's second and final meeting of the year, in Washington, July 27-30. Purposes of the session were to discuss the results of the 1981 audit of OAS activities, to plan for the 1982 audit, and to prepare the Board's Annual Report to be presented to the General Assembly of OAS later in the year. He was accompanied by Jesus Martinez, evaluator, who serves as staff assistant on OAS-related work.

Frank Zappacosta, senior group director, recently began a 2-year assign ment as Chief, Internal Audit Division, Organization of American States. Formerly the U.S. representative and Chairman of the Board of External Auditors (July 1978-December 1981), Zappacosta accepted the new assignment at the request of the Secretary General, OAS.

Allan Hovey, supervisory evaluator, authored a policy paper, "Toward a Consensus on Military Service," which was published on June 29 by the Atlantic Council of the United States, a nonprofit, bipartisan educational organization specializing in studies of strategic and international issues. The policy paper, together with nine related working papers by other members of the group, will be published in book form in September. Dr. Hovey served as rapporteur of the Council group, which was cochaired by Dr. Lloyd H. Elliott, President of George Washington University, and General Andrew J. Goodpaster, former Supreme Allied Commander, Europe.

Institute For Program Evaluation

Eleanor Chelimsky, director:

Presented invited remarks to the American Psychological Association at its annual meeting, Aug. 26, in Washington, on the subject "Improving the Effectiveness of Program Evaluation."

Has been invited by the Office of the Canadian Auditor General to serve as a member of their Advisory Committee—a seven-member panel—for their government-wide audit on program effectiveness measurement and reporting.

Her paper, "Making Block Grants Accountable," was chosen for republication as one of the outstanding evaluation articles of 1981 in the *Evaluation Studies Review Annual*, edited by Ernest R. House. (The paper was originally published in a volume of the Sage Research Progress series.)

Wallace M. Cohen, senior group director, spoke on "Program Evaluation Activities in GAO" to the Legislative Program Evaluation Section of the National Conference of State Legislatures, Chicago, July 27.

Benjamin I. Gottlieb, principal actuary, spoke to the Middle Atlantic Actuarial Club on June 3 in Hampton, VA, on the subject of a sample survey of American actuaries. The survey covered methods and assumptions used to estimate the cost of Social Security.

Virginia A. Dewolf, statistician, and Irene T. Mann, social science analyst, presented a paper entitled "Secondary Analysis in Evaluation Research: Some Statistical Considerations" at the annual meeting of the American Psychological Association, Washington, Aug. 25.

Ray C. Rist, deputy associate director, has edited a special issue of Society magazine on the topic of youth employment and education. The title of the special issue is "Unemployed, Young, and Miseducated." The lead article in the issue was written by Rist and is entitled "Playing on the Margin: Education and Employment Training."

Mission Analysis and Systems Acquisition Division

Donald E. Day, senior associate director, spoke on "The Role of the GAO in Major Acquisitions" at the Defense Systems Management College, Fort Belvoir, VA, Sept. 20.

John J. D'Esopo, group director, spoke on "The Role of the GAO in Major Acquisitions" at the Navy Systems Acquisition Management School, Washington, Sept. 24.

Lester C. Farrington, Jr., group director, discussed "GAO's Role in Test and Evaluation" at the Defense Systems Management College, Fort Belvoir, VA, Aug. 12.

Clarence O. Smith, group director, discussed GAO's report "Federal Information Systems Remain Highly Vulnerable to Fraudulent, Wasteful, Abusive, and Illegal Practices" (MASAD – 82 – 18, Apr. 21, 1982) before the Departmental Level Working Group on Information Resource Management (Policy) in Washington, Aug. 3.

Frederick Chasnov, evaluator, presented a paper on "Information Management Systems—A Concept for Centralizing Control Over Decentralized Information Systems" at the Fourth

General Assembly of the World Future Society on "Communications and the Future," held in Washington, July 20-21.

David G. Sapp, evaluator, spoke on "GAO's Views of Test and Evaluation" before the Defense Systems Management College's presentation at Fort Monmouth, NJ, Sept. 1.

Procurement, Logistics And Readiness Division

Julia Denman, senior evaluator:

Spoke on "GAO Reviews of Defense Logistics Programs," at the Air Command and Staff College, Montgomery, AL, May 20.

Made a presentation entitled "Optimizing Limited Defense Dollars—A Challenge for Logisticians" before the Atlanta Chapter of the Society of Logistics Engineers, Atlanta, June 2.

Spoke on "The General Accounting Office's Interests in Life Cycle Costing" at the Defense Systems Management College, Fort Belvoir, VA, June 10

Leslie L. Megyeri, senior evaluator, lectured on Government contract principles before the Legal Education Institute, Department of Justice, Washington, June 8.

Clark Adams, group director:

Spoke on "Cost of Accounting—Past, Present and Future" at the Professional Development Institute II of the American Association of Military Comptrollers, New Orleans, May 21.

Conducted a workshop/tutorial session at AGA's Professional Development Conference, Denver, June 15.

Discussed GAO review of the implementation of the cost accounting standards before the National Contract Management Association, Washington, June

Discussed background and the future of cost accounting standards before the Department of the Air Force Pricing Conference, Ft. Belvoir, VA, July.

Provided testimony as an expert witness before the Armed Services Board of Contract Appeal, Alexandria, VA, May 27, and Los Angeles, Aug. 30.

Program Analysis Division

Kenneth W. Hunter, senior associate director:

Spoke on the Federal budget process before presidential management interns in Warrenton, VA, May 25.

Cohosted a workshop on legislative foresight in Washington, May 26. **Donna Heivilin,** supervisory evaluator, was workshop chairman.

Was inducted as president-elect of the American Association for Budget and Program Analysis at its July executive board meeting in Washington.

Addressed the annual meeting of the National Association for State Information Systems on "The Challenge of New Federalism: A Federal and Financial Management Perspective" in Portland, ME, Aug. 9.

Osmund T. Fundingsland, associate director:

Presented a paper on "Criteria for Scientific Choice" at the Engineering Management Society Conference in Washington, June 1.

Delivered a paper entitled "Deterioration in the Art of Communication May Skew National Priorities" at the fourth general assembly of the World Future Society in Washington, July 20-21.

James L. Kirkman, management analyst, was inducted to the board of directors of the American Association for Budget and Program Analysis at its July executive board meeting in Washington.

Charles L. Vehorn, economist, coauthored an article entitled "Measuring the Contribution of Biomedical Research to the Production of Health," published in Research Policy, Volume 11, 1982.

Field Operations Division

Office of the Director

Francis X. Fee, director, addressed a group of 70 people from the Washington Seminar, Wayne State University, Detroit, MI, on "The Type of Work GAO Does and How It Is Organized To Do It," Washington, June 26.

Atlanta

Marvin Colbs, regional manager, spoke on "Carrying Out Oversight Functions—How GAO Interfaces With DOD," Maxwell AFB, AL., Aug. 4.

Pat Patterson, assistant regional manager, spoke on "Financial Management Applications of Microcomputers," at the Financial Management Institute, Dallas, Aug. 17.

John E. Stanfield has been designated Chairman of the Outreach Committee for the Atlanta Chapter of the Georgia Society of Certified Public Accountants. The Outreach Committee is part of the Society's efforts to improve services to CPAs in industry, government, and education.

Cincinnati

Frank Lawson and Michael Mc-Guire, evaluators, were elected President-Elect and Secretary, respectively, of the Cincinnati Chapter of the Association of Government Accountants for the 1982-83 year.

Daniel Meadows, Barbara Tudor, and John Adams, evaluators, were elected Chapter Directors of the Cincinnati Chapter of the Association of Government Accountants for the 1982-83 year.

Norman Hoffman, evaluator, has been elected Secretary of the Greater Cincinnati Chapter of the EDP Auditors Association.

Arthur Foreman, operations research analyst, has been elected a Director of the Greater Cincinnati Chapter of the EDP Auditors Association.

Michael Curro, evaluator, has been appointed Adjunct Assistant Professor at Xavier University and will be teaching a course on Intergovernmental Program Administration.

Dallas

William Bradley, evaluator, along with:

Richard Clough, evaluator, spoke on "The Role and Activities of the General Accounting Office," to accounting students at the Dallas Magnet High School, Apr. 20.

Art Nisle, evaluator, presented a detailed account of an actual Dallas regional office audit and the advan-

tages of a career with GAO, to the Zeta Epsilon Chapter of Beta Alpha Psi, the national accounting fraternity.

Francis Langlinais, senior evaluator:

Presented a 1-day course on "Audit Approaches to Data Processing," to the American Society of Military Comptrollers at the Corpus Christi Naval Air Station.

Received the Outstanding Regional Vice President Award at the AGA National Symposium, Denver, June 13.

James Hamilton, evaluator, has been selected to chair the Members in Government and Industry Committee (MIGI), Dallas Chapter of CPAs. He was also selected to serve as vice chairman of the MIGI Chapter Development Committee, Texas Society of CPAs.

Denver

Marcia Buchanan, evaluator, spoke on "Federal/State Budget Cycles," before the National Association of State Budget Officers, Williamsburg, VA, July 30

Emmanuel Olona, evaluator, received one of the greatest honors bestowed by the National Boy Scouts of America: induction into the Order of the Arrow, Camp Frank Rand, NM, Sept. 10-12.

Detroit

Robert W. Hanlon, regional manager:

Spoke on "Practice, Practice, Practice" before the charter meeting of the Hilltoppers Toastmistresses, in Denver, Sept. 8.

Together with James A. Reardon, senior evaluator, attended the semiannual meeting of the Mountains and Plains Intergovernmental Audit Forum, in Cheyenne, WY., Oct. 21-22.

James A. Reardon, senior evaluator, spoke on "Implementing the Single Audit" before the Federal Regional Council, Region VIII, Denver, Sept. 21

Norman G. Austen, evaluator, presented a symposium on "Auditing Computer-Based Systems" to representatives of the National Bureau of Standards, the Department of Commerce, other Government agencies,

and various commerical ADP vendors, Gaithersburg, MD, Sept. 29.

William Laurie, evaluator, presented a paper entitled "Well-being of Older People: Measurable and Dynamic," at the Joint Statistical meeting of the American Statistical Association, Cincinnati, Aug. 19.

Patrick Iler, evaluator, presented a paper entitled "Graying of The National Budget: The Impact on An Aging Population," at the Gerontological Society of America meeting, Boston, Nov. 22.

Kansas City

David Hanna, regional manager, along with Suzanne Valdez, evaluator:

Attended the 1982 Joint Conference of Audit Forums, Nashville, May 10-12.

Briefed the Federal Regional Council on the progress of the Single Audit Implementation in Federal Region VII, Kansas City, July 22.

Suzanne Valdez, evaluator, attended the National State Auditors Association annual meeting, Memphis, June 7-9.

Los Angeles

Victor Ell, assistant regional manager, spoke on:

"Health Care and Government, A Changing Scene," as the keynote speaker before the 23rd Institute on Financial Management, Hospital-Financial Management Association, San Diego, May 5.

"Program Evaluation," before the USC Graduate School of Public Administration, Los Angeles, June 17.

"Auditing Opportunities with the GAO," before Beta Alpha Psi, the national accounting fraternity, at California State University, Los Angeles, July 9.

Mr. Ell also hosted the Auditor General of Sri Lanka, presented an explanation of GAO's regional office role and operations, and toured the Jet Propulsion Laboratory audit site, July 1.

Fred Gallegos, evaluator:

Taught a graduate course on management information systems at California State Polytechnic University during the spring quarter, Pomona.

Was the project leader for developing a course on EDP auditing and controls and participated in developing a paper published in the EDP Auditors Journal (spring issue), entitled "DPMA's Model Curriculum for Computer Information Systems Education."

Received the "Distinguished Alumnus Award for the School of Business" from California State Polytechnic University, Pomona, May.

Phil Abbinante, evaluator, spoke on "A Compendium of Resource Materials Available Through Agency Sharing," before the Federal Executive Board, Los Angeles, Aug. 12.

Rod Moore, evaluator, completed a Certificate Program on Managing Transportation Programs and Systems from the Institute of Transportation Studies, University of California, Irvine.

Helen Figlio, administrative officer, received an Associate of Arts degree from Pasadena City College, June.

Norfolk

Don Ingram, senior evaluator, received several awards from the Virginia Peninsula Chapter of the American Association of Government Accountants, Hampton, June 15:

The 1982 Chapter Membership Award for "outstanding performance in recruiting new AGA members."

The 1982 Exceptional Service Award for his "exemplary participation" in national and local AGA activities.

The Past President's Award for "eminent service" to his chapter.

Paul Latta, evaluator, received the 1982 President's Special Award for his "constant assistance and dedicated service and for job effectiveness in promoting the goals of the Association of Government Accountants."

Natalie Oliver, evaluator:

Along with **Joe Stevens**, assistant regional manager, received the AGA's Virginia Peninsula Chapter's Special Recognition awards for their service as secretary and director, respectively.

Was named the Chapter's 1983 secretary.

Edwin Soniat, senior evaluator, presented a workshop on productivity and GAO studies as part of a seminar sponsored by the Denver Federal Executive Board and the Joint Financial Management Improvement Program, Denver, Apr. 29.

Philadelphia

Hilary Stephenson, evaluator:

Has successfully completed the 4year Presidential Management Intern Program.

Was elected President of the Philadelphia Women's Network, June 30.

San Francisco

Hal D'Ambrogia, assistant regional manager, was appointed to a California CPA Society task force considering possible policy changes to the California Accountancy Act, Aug. 5.

Gil Bowers, senior evaluator, spoke on "The Status of Performance Appraisal in the Federal Government," to the New England Federal Personnel Council, Boston, June 28.

Jeff Eichner, senior evaluator, was elected to the AGA Board of Director's National Executive Committee for fiscal year 1983.

Frank Campos, senior evaluator, wrote an article on IRS Audits published in the newspaper of the San Jose Mexican-American Chamber of Commerce, Sept.

Pamela Johnson, evaluator, served as managing editor of Urban Action, San Francisco State University's Urban Studies Journal, for the academic year 1981-82.

Dale Vigus, computer systems analyst, taught a one-semester course on data processing for business and accounting students at Golden State University, San Francisco.

Hans Bredfeldt, operations research specialist, was elected vice chairman of the Office Automation Research Forum of San Francisco, Aug. 14.

Teena Amador, management assistant, was selected as a finalist in the San Francisco Bay area Federal Executive Board's 1982 Federal Employee of the Year program, Aug.

Seattle

Charles Mosher, evaluator:

Moderated the American Water Resources Association's Washington Section conference on Quality of Water For and From Irrigation, Seattle, May 12

Authored a paper entitled "Getting Better Data For Decisions—A Challenge to GAO in Program Analysis," published by the American Water Resources Association in its Symposium Proceedings, Unified River Basin Management—Stage II, Summer 1982

Received notice, as President of the Washington Section (chapter), American Water Resources Association, that the Section has been selected the AWRA Outstanding Section for 1982 for its program innovativeness, membership growth, and enhancement of the Association's image as a professional water resources organization, Aug. 12.

Donald Praast, senior evaluator, received both a 1982 National award for recruiting new members and the Seattle AGA chapter's Past President's Award for "untiring and devoted service as President 1981-82," June.

Ronald Kelso, evaluator, addressed the Anchorage Chapter, American Society of Military Comptrollers, on GAO's issue area planning system, Aug. 31.

Annual Awards for Articles Published in The GAO Review

Cash awards are presented each year for the best articles written by GAO staff members and published originally in the **The GAO Review.** The awards are presented during the GAO Awards Program held annually in October in Washington.

One award of \$500 is available to contributing staff 35 years of age or younger at the date of publication and another is available to staff over 35 years of age at that date. Staff through grade GS-15 at the time they submit the article are eligible for these awards.

The awards are based on recommendations of a panel of judges designated by the Editor. The judges will evaluate articles from the standpoint of their overall excellence, with particular concern for

- · originality of concept and ideas,
- degree of interest to readers,
- · quality of written expression,
- · evidence of individual effort expended, and
- relevance to "GAO's mission."

Statement of Editorial Policy

This publication is prepared primarily for use by the staff of the General Accounting Office (GAO) and outside readers interested in GAO's work. Except where otherwise indicated, the articles and other submissions generally express the views of the authors and not an official position of the General Accounting Office.

The GAO Review's mission is threefold. First, it highlights GAO's work from the perspectives of subject area and methodology. (The **Review** usually publishes articles on subjects generated from GAO audit work which are inherently interesting or controversial. It also may select articles related to innovative audit techniques.) Second and equally important, the **Review** provides GAO staff with a creative outlet for professional enhancement. Third, it acts as historian for significant audit trends, GAO events, and staff activities.

Potential authors and interested readers should refer to GAO Order 1551.1 for details on **Review** policies, procedures, and formats.

The GAO Review

Editor John D. Heller **Program Analysis Division** Assistant Editor Louis Fernheimer Carol A. Codori Regional/Headquarters Liaison Administrative Assistance James Campbell Diane E. Grant **Atlanta** Alberta Troof Waylon L. Catrett **Publishing Services Boston** Sharon Ferguson, Acting Graphics Chief Paul Slater, Jr. Linda J. Kemp, Writing Chief Chicago Sharon Connolly, Writer-Editor Stewart Herman Dennis O'Connor, Writer-Editor Cincinnati William Michael Spears, Graphics Designer Elmer Taylor Richard Rockburn, Photographer Dallas Walker Smallwood, Printing Specialist Dianna Taylor Liaison Staff Denve_s Office of the Comptroller General Ramela K. Tumler Diane E. Grant Detroit Office of the General Counsel Randall Conle Marilynn M. Eaton Kansas City Office of Internal Review Arnett E. Burrow David Childress Los Angeles Office of Organization and Human Development Lionel C - Coope Don O'Sullivan New York Office of Policy Eric Johnson Marvin Brown Norfôlk -Office of Program Planning Melissa van Tine Daniel L. Johnson Philadelphia General Services and Controller Tony Pinto Susan ื B. Burtner San Francisco Personnel Gerhard Brostron Lula A. Totaro Seattle Accounting and Financial Management Division Alvin S. Finegold Ronell B. Raaum 🗧 Washington Resources, Community, and Economic Development Division Howard G. Cohen Richard Hart Federal Personnel and Compensation Division Sheila Jones General Government Division Anne M. Hilleary **Human Resources Division** Joseph Eglin International Division James S. Klapp Institute for Program Evaluation Wallace Cohen Mission Analysis and Systems Acquisition Division Philip W. Pennington Procurement, Logistics and Readiness Division

Noble Homes

U.S. GENERAL ACCOUNTING OFFICE WASHINGTON, D.C. 20548

OFFICIAL BUSINESS

POSTAGE AND FEES PAID U.S. GENERAL ACCOUNTING OFFICE



CONTROLLED CIRCULATION RATE

,